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ABSTRACT

This report describes a project launched under the auspices of the Association of American Geographers to produce a series of modules designed to increase and improve the representation of women in introductory college human geography courses. The project aimed to produce materials which could be used to supplement existing courses in diverse institutional settings. The report is arranged in three parts: Part one describes the project and activities; part two discusses project evaluation; and the third part (the major portion of the document) contains appendices to the report. Part one describes the development of the six units which were originally entitled: (1) Women and the Traditional Landscapes; (2) Women and Structured Landscapes; (3) Geographic Perspectives on Social Change: The Example of Women in Crime; (4) Locational Decision Making: The Case of the Day Care Center; (5) Village to Barrida: Contemporary Female Migration to Cities in Latin America; and (6) Farm to Factory: Female Labor Migration in Early 19th Century New England. The units will soon be revised and published by the Education Development Center (55 Chapel Street, Newton, MA 02160). Part two of the report, focusing on the formative evaluation of the units, describes how the preparation of the modules was a multi-stage activity. Instructors representing different teaching situations and institutional characteristics were selected to review and pilot teach the materials. Project evaluation involved ascertaining what criteria instructors, students, and expert reviewers considered important, assessing the modules in the light of these criteria, and making revisions. Basic data sources for evaluation included workshops, meetings, conversations, and correspondence with instructors while they were teaching, and some student evaluation. Appendices include a revised evaluation plan, sample student evaluation questionnaires, formative evaluation reports on the modules, and module review guidelines. (RM)

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OVERCOMING MASCULINE BIAS IN INTRODUCTORY COLLEGE HUMAN GEOGRAPHY:

A MODULE APPROACH

SP 012 078

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PART I

PROJECT OBJECTIVES AND ACTIVITIES

Introduction

Geography is very much a masculine discipline in its traditions and professional composition. Approximately ninety percent of college geography teachers are male, and textbook titles such as A Geography of Mankind, Man and His World and Man, Space, and Environment accurately reflect the content of materials available. Large numbers of students are enrolled in introductory geography courses which vary in their approach to the field. Some are concerned solely with the physical environment, others with human relationships with the environment, and still others study human societies and behavior.[1] Those taking human geography courses have no opportunity to consider women's relationships with their environment, their contributions to shaping the landscape, or their spatial behavior. Because changing the multitude of textbooks is a long task, this project set as objectives the development, evaluation and preliminary dissemination of a set of teaching and learning modules dealing with women which could be used as supplements in introductory human geography courses until the time when suitable texts are generally available.

Six units were developed, representing different types of introductory instruction in geography, as well as different levels of gender balance. Some are designed for traditional cultural courses and courses with a people

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[1] 'Human geography' includes all but the first of these types.

and environment theme. Others incorporate more social science analysis of spatial behavior and distributions using modern sources of data and a variety of skill building student activities.

Under the series title, Toward a Gender Balanced Geography, the units produced include:

1. "Women and Traditional Landscapes"
2. "Women and Structured Landscapes"
3. "Geographic Perspectives on Social Change: the Example of Women in Crime"
4. "Locational Decision Making: the Case of the Day Care Center"
5. "Village to Barriada: Contemporary Female Migration to Cities in Latin America"
6. "Farm to Factory: Female Labor Migration in Early 19th Century New England"

Each unit is intended as a starting point which the individual instructor may modify and supplement in accordance with his or her own teaching strategy. The contents comprise:

1. A student reading with permission to reproduce freely for classroom use.
2. An instructor packet with
   a. key concepts, skills and value issues
   b. materials for lecture discussion
   c. exercises and suggestions for student activities
   d. annotated bibliography (some include audio-visual suggestions).

Units 5 and 6 share topical content, but have different regional and historical settings. The others have little overlap in their geographic content. Thus, the attempt is to provide materials which represent the diverse disciplinary orientations within introductory geography, and an array of teaching

strategies, so that the instructor may choose the one or two units appropriate for his or her situation. The units are also intended to serve as models for instructors wishing to develop further gender balancing supplementary materials.

Module Development and Review

The preparation of the modules was a multi-stage activity. In Fall 1978, Bonnie Loyd (Landscape Magazine), Janice Monk (University of Illinois at Urbana-Champaign), Arlene Rengert (West Chester State College), and George Rengert (Temple University) prepared initial drafts of four modules with the following titles:

1. "Women's Role in Changing the Face of the Earth."
2. "Locational Decision Making: Day Care Centers as a Case Study."
3. "Unanswered Questions: Migration of Women to Latin American Cities."
4. "Women in Crime."

Eight college instructors were selected to review and pilot teach these materials during the Spring 1979. Six of the eight were able to attend a workshop for two days in Urbana in February to study and discuss the modules prior to implementation. The participating instructors were chosen to represent different clienteles and teaching situations, including a private liberal arts college, large state universities, and city commuter colleges with minority and mature students. A broad regional distribution was also obtained with the goal of facilitating later dissemination. The majority of the instructors were male because this is considered more representative of the larger target population. Table 1 identifies the participant instructors and their settings, and notes the nature of their participation.

Table 1. Pilot Teaching of Modules

Participant Instructors	Attended Workshop February 1979	Attended Conference April 1979	Unit Taught No.	Teaching Context
Dr. Perry Hanson, Chair Department of Geography Middlebury College Middlebury, VT 05753	X	X	4	Private liberal arts college; lecture/discussion, exercise format; social approach.
Dr. James E. Landing Department of Geography, Box 4348 University of Illinois at Chicago Circle Chicago, IL 60680	X		1-5	City commuter university including minority enrollment (Black, Hispanic) lecture format; introduction to physical/economic/cultural geography.
Dr. David Lee, Chair Department of Geography Florida Atlantic University Boca Raton, FL 33431		X	1-5	State upper division university; some mature students; lecture/discussion format; small group work; introductions to human geography/cultural approach.
Dr. Michael Libbee Department of Geography University of Oklahoma Norman, OK 73069	X	X	4	Large state university; doctoral department of geography; guided design approach; social science orientation.
Dr. Roger Miller Department of Geography University of Colorado Boulder, CO 80309	X	X	4, 5	Large state university; doctoral department of geography; lecture/small group discussion; social science and cultural orientation.
Dr. Janet Momsen* Department of Geography University of Calgary Calgary, Alberta, Canada T2N 1N4		X	4	Provincial university; doctoral program in geography; lecture/discussion sophomore level social geography.
Dr. Eldor C. Quandt Department of Geography Western Michigan University Kalamazoo, MI 49008	X		-	Regional state university; programmed instruction format; social science approach.
Ms. Lowry Taylor Department of Geography & Environmental Studies Northeastern Illinois University 5500 N. St. Louis Avenue Chicago, IL 60625	X	X	1,2,5	City commuter university; high percentage mature age students; lecture/discussion with extensive readings; cultural geography orientation.

*Now at University of Newcastle-Upon-Tyne, Newcastle-Upon-Tyne, U.K.

Interviews with the instructors about their courses at the February workshop revealed a variety of orientations to the discipline, different teaching styles and institutional characteristics. One instructor, for example, was teaching a large lecture class introducing several aspects of geography with relatively little opportunity for student discussion or participation exercises. Another was engaged in developing guided design materials. One was teaching primarily cultural geography with extensive student reading assignments; another geography as a social science in a lecture-discussion format. While this diversity is typical of introductory human geography, and had been anticipated in choosing unit themes, it became clear that the number of units each instructor could pilot would be quite variable, and that instructors using the same modules would be using different parts of them in different ways. Accordingly, evaluation procedures were adapted to each individual situation, and quantitative data from the cases cannot be combined as if they refer to common material. The evaluation plan developed is included as Appendix 1.

In designing the evaluation, the major goal was to obtain information which would assist the authors to revise their draft modules. Basic data sources in addition to the workshop discussions, included conversations and correspondence with the instructors while they were teaching the materials, a meeting in April 1979 during the national convention of the Association of American Geographers, completion of reviews by a small number of selected student evaluation consultants, where possible short questionnaires from entire classes, and review of papers, or completed student exercises by the module authors and/or the project associate director. Appendix 2 provides a selection of the instruments used to collect data from students and student

evaluation consultants.

At the end of the Spring semester 1979, the evaluation data were analyzed by the project's associate director who then prepared reports for the module authors. Two of these reports are included as examples in Appendix 3. Based on these analyses, Unit 1 was revised into two separate modules, "Women and the Cultural Landscape" and "Women and the Built Environment;" Unit 2 was substantially revised under the title "Geographic Perspectives on Social Change: The Example of Women & Crime;" fewer changes were made to each of the other modules which were re-titled "Locational Decision Making: The Case of the Day Care Center" and "Village to Barriada: Contemporary Female Migration to Cities in Latin America."

During this period, several of the pilot instructors also prepared supplementary materials. Roger Miller wrote an adaptation of "Village to Barriada" entitled "Farm to Factory: Female Industrial Migration in Early Nineteenth Century New England," now identified as Unit 6 in the series. The intent of this unit is to provide materials for an instructor wishing to include North American rather than Latin American examples in a course, or who feels better prepared to handle North American geography. Michael Libbee, working concurrently with an Exxon grant to introduce guided design instruction, adapted the "Day Care" module to this new format (see Appendix 4). David Lee developed an exercise "Female-Male Differences in Spatial Behavior: A Student Participation Unit" (Appendix 5), which has been adapted for inclusion in Unit 2. Jim Landing prepared a report on a seminar series held with a small group of women students based on all four first draft modules. This was combined with material prepared by Janice Monk for a course "Women, Space & Place" which also used the modules, to produce "Geographic Perspectives on

Women: Suggestions for an Undergraduate Seminar," a set of instructor materials (Appendix 6).

In Fall 1979, two workshops were arranged as experimental dissemination mechanisms and also to obtain feedback on the second draft modules. The first of the workshops, one and a half hours in length, was held at the West Lakes Regional Meeting of the Association of American Geographers in Chicago on October 11 under the title "Discovering Women's Place: Teaching Modules for Introductory Human Geography Courses." Leaders of this session were Janice Monk, who described the project goals and outlined the nature and content of the modules; Lowry Taylor, who described her integration of the first module (now Units 1 and 2) into an introductory cultural geography course and reviewed the reading log project which included bibliographic items suggested in the module (see Appendix 7); and Jim Landing, who reported on his adaptation of the four modules for a large lecture course (see Appendix 8). Geographers attending the workshop examined the second draft modules "Women and the Cultural Landscape," "Women and the Built Environment" and "Locational Decision Making: The Case of the Day Care Center," discussed the modules, and gave their reactions to the modules and the project in general.

The second workshop, also one and a half hours in length, was held at the Annual Meeting of the National Council for Geographic Education in Mexico City on November 6. Arlene Rengert and Janice Monk briefly described project goals and module format and Units 5 and 4 respectively, Bonnie Loyd outlined Units 1 and 2, George Rengert Unit 3; Roger Miller and David Lee commented on their experiences teaching the modules, and introduced the new materials they had prepared. Participants were provided with copies of the five units plus

the supplementary materials prepared by Lee, Libbee, Miller, Landing and Monk. They were given an opportunity to review all modules briefly, then asked to complete an evaluation of one or two modules of their choice (see Appendix 9 for questionnaire). Landing, Lee, Libbee, Loyd, Miller, Monk, A. Rengert and G. Rengert participated in informal discussions with geographers attending the session.

Following review of discussions at these two workshops, it was decided to add a further stage of review, not initially planned, before writing final versions of the module. Three geographers with extensive experience in developing instructional materials were requested to study the modules and recommend further changes, particularly from a pedagogical standpoint. Salvatore Natoli, Educational Affairs Director, Association of American Geographers reviewed Units 1-5; Alan Backler, Social Studies Development Center, Indiana University, reviewed Units 3, 4, 5 and 6. Dorothy Drummond, an author of geographic texts and a private consultant, reviewed Units 1 and 2. Backler and Drummond were requested to respond to a specially prepared list of questions (Appendix 10). In addition, Mary Keetz, Department of Education, West Chester State College, analyzed and reported on the reading levels of each of the modules. While these reviews were in progress, Unit 3 was introduced by Loyd in a cultural geography course at San Francisco State University and her students wrote detailed critiques. In addition, Unit 4 was adapted for use by Marilyn Brown and teaching assistants at the University of Illinois, Urbana-Champaign in an introductory social geography course with a more quantitative orientation than used by the other pilot instructors.

On the basis of all the additional information gathered during Fall, 1979, final editions of six units were produced. Most substantial changes included thorough revision of Units 1-3, adaptation of Lee's exercise for includion in Unit 2, addition of a quantitative appendix to Unit 4 (prepared by Brown) and specification of the concepts, skills and value issues included in each unit.

PART II

PROJECT EVALUATION

Issues and their Resolution

As noted in Part I, the major goal of formative evaluation in the project was to provide information to assist the authors in revising the modules. This evaluation involved ascertaining what criteria instructors, students, and expert reviewers considered important, assessing the modules in the light of these criteria, and making revisions deemed desirable. In reporting here it seems more important to highlight issues which emerged during the formative evaluation than to present in detail the information collected on the first and second drafts of each module. The latter is primarily of value to the authors (see sample reports in first drafts of Units 1 and 4 in Appendix 3). The discussion below identifies five issues and comments on their resolution.

1. One of the first issues to emerge in discussions with participant instructors and at the West Lakes Regional A.A.G. workshop was the question of the extent to which a feminist approach should be adopted. Given the largely male ultimate target population of college geography instructors, one could assume that the final modules would face a market characterized by a certain degree of apathy and/or resistance. Some participants felt that strongly feminist material would hinder acceptance, and that preparation of material <u>about</u> women to <u>supplement</u> information on males was an appropriate objective. Others argued only radical presentations could lead to social changes necessary for women's equity.

In reviewing these positions a set of pervasive questions was developed, which were ultimately included in the discussion sections of Units 1 and 2 and in the paper "Geographic Perspectives on Women: Suggestions for an Undergraduate Seminar." In resolving the question of approach, an essentially moderate feminist position was adopted. Each unit either questions the appropriateness of non-feminist interpretations of the topics under discussion, raises questions about the social implications for women of certain geographic patterns and processes, or involves students in reflecting on contemporary social changes and their impact on individual women and men. It was recognized that instructor's own viewpoints will be instrumental in classroom presentations, and that the project cannot, in fact, control the message. Further, it was concluded that viewpoints which the authors considered "moderate" were significant departures from those characteristic of standard geography texts, so that in some senses the very existence of the modules was "radical!" Nevertheless, a range of approaches was incorporated within the basic moderate stance which would facilitate the individual instructor's choice of perspective. Examples of these alternatives are described below.

Units 1 and 2 question the omission of women's contributions from standard cultural geographic interpretations of human modifications of the landscape throughout history. In teaching these units, the instructor may choose to focus on the description of women's contributions, and place more or less empahsis on <u>why</u> these contributions are usually ignored in geography. Unit 3 deals with sexual differences in spatial behavior and some of their manifestations in criminal activity. If the instructor wishes, discussion of this module can emphasize the social significance of changes which might occur in female

spatial behavior with increased liberty for women.

In developing an adaptation of Unit 4, one pilot instructor emphasized locational decision making primarily from the point of meeting the market demand for day care with relatively little emphasis on social issues. Another emphasized the need for sharing family responsibilities for child care and the particular difficulties of single mothers or those with restricted access to transportation, who might be better served by social reorganization such as flexible hours in work and service provision. Units 5 and 6 focus on women as active decision makers in migration from rural to urban areas, deviating from common treatments which deal with migration primarily as a male activity or resulting from male decisions. However, the instructor may choose between exercises which emphasize decision making or those which involve manipulation of census data which raise questions about sex differences in migration, but do not dwell as heavily on the social and personal aspects of women's lives.

2. A second recurring issue was the question of how the modules "fit" conventional interpretations of geography. This arose more as a problem for students, some of whom identified topics such as crime and day care with sociology, or women's role modifying prehistoric landscapes as a topic in anthropology. To deal with this issue, the final versions of the modules specifically present in their introductions the kinds of geographic questions or concepts which form the basis of the unit. Lists of the key concepts involved in each unit, as well as statements of objectives, were added to the instructor's materials, again to emphasize the geographic content and skills contained in each module. It was also thought that these listings of concepts and objectives would help instructor's identify how the modules would mesh readily into a course, a criterion considered particularly important by one of the final reviewers.

3. Although some of the pilot instructors had been involved with geographic research on women or sex differences, it was also clear that they could not be expected to be as familiar with resource materials on women as they might be with resources needed to supplement texts teaching standard geographic content. Given that the ultimate target group would be composed of teachers who could be expected not to be familiar with material on women, the decision was made to include as part of the modules a section "Material for Developing a Lecture Discussion" and an annotated bibliography. Also, exercises and discussion questions were developed in more detail than is common in instructor's guides to human geography texts.

4. Another aspect of innovation considered in developing project materials was whether to include topics very new to the field of geography or to stick to established content of introductory textbooks. The decision was to introduce some topics and concepts which are appearing in geographic research literature and in some upper division courses, which have not yet commonly penetrated introductory textbooks. The choice of crime as the topic of Unit 3, the introduction of equity as well as efficiency criteria in location of service activities, and the use of "time-geography" in Unit 4 are examples of this type of innovation. The decision to introduce this material was in response to the hypothesis that the modules might be more attractive to instructors if they did not rely on replicating material already in texts, (though introducing new content on women), but rather helped enrich courses by introducing up-to-date geographic research at a level appropriate for the beginning student. This hypothesis largely remains to be tested (other than with the relatively small population of instructors involved in the project).

However, it became apparent at workshop discussions that the inclusion of such material would necessitate provision of resources such as specially written student readings and discussion of pedagogical issues such as the reading level of research items included in the annotated bibliography.

5. A final issue emerging during the formative evaluation worth noting here relates to perception of the project's goals. The original proposal suggested that one of the shortcomings of standard geographic curriculum materials is that they restrict women's conceptions of their own potentials. While the authors were sensitive to this issue in preparing modules (for example, showing women as agents of landscape change, and as decision makers), they did not focus directly on attempting to motivate women students to enter careers in geography. At the first workshop, however, one of the pilot instructors indicated that his motivation for participating in the project was as a means for attracting women into geography courses and to become geography majors. He appeared to expect a focus on careers in geography for women and references to women geographers as role models. Given the nature of the original proposal (preparation of materials for introductory human geography courses largely taken for general education purposes), we did not pursue this professional/career development theme. The instructor's reaction, however, identifies a task which could be the focus of a future project.

Project Achievements

Because all evaluation data were collected on the first and second draft versions of the modules for purposes of revision, we cannot present definitive judgements about the final product. However, since the final modules

incorporate changes in response to the formative evaluation, we will assume that responses to them would be at least equally favorable and presumably more positive than to the earlier versions.

Topic Suitability and Interest

In terms of topic choices and their suitability for introductory human geography courses, all the modules appear satisfactory for some instructors. Of the eight pilot instructors, seven included modules in their courses (see Table 1). Most frequently selected was Unit 4 "Day Care" which was used by six instructors, plus one project staff member. Unit 5 "Village to Barriada" was used by four instructors and a staff member; Units 1 and 2 were used by three instructors and a staff member, and Unit 3 by two instructors and two staff members. The one pilot instructor who did not find the modules suitable employs a highly structured audio-tutorial method in one introductory course, and had an unusually high proportion of upper division students register in the other course he had considered for inclusion in the project. Further, he had interpreted the project's goals to be more directly oriented towards recruiting women students into geography than was the case.

Thirteen instructors completed reviews of the second draft versions of Units 1-5 prepared for a workshop at the National Council for Geographic Education meeting. These instructors represented a good cross section of the discipline in that their teaching experience varied from 2 to 24 years ($\bar{X}$ = 11 yrs.), and they came from 4 year, master's and doctoral level institutions (predominantly the latter two categories). One high school teacher and another with high school experience were also included. Six were female, seven

male, and in this sense the group is not representative of the discipline. It is hardly surprising that women geographers will be disproportionately interested in the materials, but still salutory that slightly more than half of the group was male. This is quite atypical for sessions dealing with women's material at geography meetings where the audience is usually overwhelmingly female.

In reviewing the modules, the instructors at the workshop generally rated them as suitable for their classes. Units 1, 2 and 5 received highest ratings ($\bar{X}$ = 4.5, 4.3 and 4.3 respectively on a scale where 5 = highly suitable), followed by Unit 4 ($\bar{X}$ = 3.8) and Unit 3 ($\bar{X}$ = 3.75). Notably, the rankings reflected almost exactly the disciplinary orientations identified by the instructors. Those who identified themselves as cultural/historical geographers and/or Latin Americanists[1] rated most highly Units 1, 2 and 5; those who identified themselves as social scientists rated most highly Units 3 and 4. This division clearly supports the project decision to prepare modules specifically oriented towards the two major approaches in human geography - the cultural and the social. Focus on either to the exclusion of the other would substantially impact the likelihood of widespread utility of the materials.

As noted earlier in this report no two pilot instructors taught the same combination of modules in comparable situations, so that comprehensive, comparative student evaluation data on the modules cannot be presented. In the one case where a relatively large class was exposed to all modules, but in lecture rather than activity format, the cultural geography unit (later Units 1 and 2) was rated of greatest interest ($\bar{Y}_m$ = 3.7 on 5 point scale (N = 28,

[1]The modules were presented at a meeting held in Mexico City which was probably particularly attractive to faculty with Latin American interests. Also, in the United States, cultural geogrpahy has been more closely identified with interest in Latin America than has social geography.

$\bar{X}_f$ = 4.3, N = 15).[1] These students also considered the topic "Women's Role in Changing the Face of the Earth" as one which should be included in an introductory geography course (males 82% yes, females 87% yes). It may be significant that in this course, the instructor, although teaching a general introduction to the discipline (cultural/social and physical), is himself a cultural geographer. This student group overall rated "Women in Crime" next in interest ($\bar{X}_m$ = 3.1; $\bar{X}_f$ = 3.4), an anticipated response in a large metropolitan area. Women students rated "Day Care" of about equivalent interest ($\bar{X}$ = 3.5) though men saw it of relatively low interest ($\bar{X}$ = 2.6). Similarly with the Latin American migration unit — women's interest was higher ($\bar{X}$ = 3.1) than the relatively low male interest ($\bar{X}$ = 2.5).

Questioning on whether such topics should be included in a geography course also brought substantially different responses from the sexes in this large class. Sixty percent of the women thought the Latin American migration material should be included, versus 33% of the men, 53% of the women thought material on women in crime and day care should be included, versus 46% and only 22% respectively of the men. Qualitative comments suggest that basic to the lower percentages for the social geography topics than cultural, from both men and women, are preconceived notions of geography as a field, and association of topics such as crime with sociology and social work, and of day care with social work and education.[2] Some students clearly associate geography primarily with study of the physical environment and express this in their rejection of the suitability of topics such as crime and day care.

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[1] Not all students in the class completed the questionnaire evaluating all modules.

[2] As noted earlier in this report, particular attention in the final version of the modules was given to stressing the interests and approaches of geographers to these topics in the introductions and identification of key concepts.

In another class in which the cultural unit was taught and in which wide latitude in individual selection of reading material was permitted, more students chose to read material related to the module topics than on other topics. Again, women rated the materials of more interest than men, though the men seem to have found them more useful to understanding the course, and contributing more to the development of new perspectives on women's roles than did the women (see Appendix 3). These conclusions are based on small samples however, and can only be interpreted as tentative generalizations for further exploration. It may also be relevant that the reading items in question are largely historical in nature and that in another institution a small discussion group of women felt the cultural historical materials emphasized women's traditional "home, hearth and child care" roles too strongly.

Student evaluations in another class of the migration unit show virtually no sex differences in mean ratings for male and female students on interest, worthwhileness or insights to understanding women's lives (interest $\bar{X}_m = 3.57$, $\bar{X}_f = 3.55$; worthwhile $\bar{X}_m = 3.4$, $\bar{X}_f = 3.45$; insights $\bar{X}_m = 3.41$, $\bar{X}_f = 3.53$; $N_m = 19$, $N_f = 18$). Closer inspection however, shows that women giving positive ratings (4 and 5 on 5 point scale) were about evenly divided between those giving values of 4 and those giving 5, though the males gave almost no "5" ratings but many "4's". The mean values reflect a spread of women across all values, including strongly positive and strongly negative; whereas the men are more inclined towards neutral or moderately positive positions, but not strongly negative. The data are not sufficient to hazard explanations for these patterns, but do suggest interesting possibilities for future research of more depth into variations between the sexes in reactions to material about women. It is encouraging to have positive responses from

men and indications that they are gaining new insights into women's lives. It is intriguing to discover that women may find the material interesting, but contributing less to new insights, and that women's responses may be more strongly positive or negative than men's.

The effect of instructional sytle on student responses should also be more fully explored. The migration unit involved a role-playing activity. Qualitative comments indicated that more of the women than men students felt inadequately prepared to cope with role playing about Latin American cultural problems on a limited information base. Does this reflect some sexual difference in willingness to speculate, recognize one's own inadequacies, speak in class, instructor dependency etc? Sexual differences are also hinted at in the qualitative responses to the guided design version of the day care unit, where more women than men requested clearer or more explicit instructions.[1] Otherwise sexual differences in response to this version of the day care unit were slight, though male responses on interest, worthwhileness and new insights are slightly more positive than female. (Interest $\bar{X}_m = 3.4$, $\bar{X}_f = 3.2$; worthwhile $\bar{X}_m = 3.5$, $\bar{X}_f = 2.9$; insights $\bar{X}_m = 3.43$, $\bar{X}_f = 3.39$; $N_m = 28$, $N_f = 38$.) In this version of the module, the instructor focused on selecting a suitable location for new day care centers as a private business. Teaching of the module in another class which treated the question of family's access to day care and the difficulties of arranging daily schedules to combine various domestic

[1] There were more women in the class, but a greater proportion of the women than men added qualitative comments to questionnaires.

responsibilities, seemed to the instructor to engage women's students concern more than men's. Another of our instructors, Momsen, has now taught the day care module in both Canada and the United Kingdom, with a more positive response in Canada. Here she felt the greater maturity of the Canadian class. compared with an English class of students mostly coming directly from high school, had distinct bearing on the differences observed. These apparent differences in reaction support our original notion that teaching materials will not produce a constant response. Differences in instructional style, content emphasis and class composition will lead to a variety of responses. Nevertheless, in summarizing the overall student reactions to the first draft materials, we can report generally mildly positive reactions, with more responses being strongly positive than strongly negative. Since qualitative negative comments often refer to aspects of the presentation rather than content, we expect that the careful revisions of the second and third drafts would yield higher student evaluations than the first draft.

Involving Participant Instructors

There were three reasons for including faculty from a number of institutions in the development of the modules. First, in order to improve the modules, we were interested in obtaining reviews from teachers and students who experienced the materials in the classroom. Second, we wanted to see if instructors would see the materials as a basis for development and expansion of further teaching materials. Third, we wanted to develop a nucleus of people who might be willing to become involved in future dissemination of teaching materials about women.[1] All of these objectives have been achieved.

[1] Another reason was to provide at least a portion of our ultimate target population with an equitable education.

As noted earlier in this report, six of the eight instructors participated in a weekend workshop in Urbana which provided insights into the kinds of reactions instructors might have on initial contact with the modules. Six (a different combination) also provided mid-semester commentary at the April meeting after they had some experience teaching the units. In addition, they administered questionnaires to students, and provided evaluative commentary in telephone interviews, and in some cases, in written reports. They sent selected student exercises and student reviews of various units. In combination, these data allowed us to identify the significant issues described earlier in this report, and also provided constructive suggestions for revision. These suggestions were both in general and specific terms. For example, the division of the original Unit 1 into two separate units, and the addition of contemporary material to the historical content of Unit 1 resulted from these reviews. Specific changes in wording, alterations to illustrations, and revisions to increase clarity of subsections also resulted from their commentary.

Several of the instructors made contributions demonstrating that the modules could serve as a basis for developing additional teaching materials. These have already been identified in Part I, including the contributions by Landing, Lee, Libbee and Miller. In addition, a colleague of Hanson's will use Unit 4 as the basis for a unit in computer assisted instruction.[1] Further, some instructors used the modules as the starting point for additional reading assignments or for report preparation. For example, Hanson's students took up day care as a term paper topic, and Lee's students prepared group reports on topics related to the units, doing additional library research.

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[1]Supported by an N.S.F. Local Course Improvement Grant to the Department of Geography, Middlebury College.

People involved with the project have also used the units as a resource in contexts other than introductory human geography courses. Loyd included Unit 3 in a graduate seminar in social geography as San Francisco State University. Papers from this seminar yielded insights into spatial aspects of criminal behavior, for example as it affects women as victims rather than criminals. Natoli requested module copies for selected students in a course at the American University, Washington, D.C., and also included in this course material about women drawn from other sources. Monk and Rengert discussed the project with a variety of people on their own campuses and in a presentation at the National Women's Studies Association. From these conversations and presentations they received indications that modules might be included in inter-disciplinary Women's Studies courses. Monk also used all modules in a course "Women, Space & Place" at the University of Illinois, and supplied second draft versions of Unit 4 for use in introductory social geography at the University of Illinois. In the latter instance, the instructor (Brown) used it as the basis for a three-week class exercise and prepared a quantitative supplement for the final version.

The pilot instructors have also been willing to participate in the limited diffusion activities carried out to date, both formal and informal. Landing and Taylor, together with Monk, presented the workshop at the West Lakes Regional Meeting of the A.A.G. in Chicago in October 1979. Landing, Lee, Libbee, Miller, together with primary authors Loyd, Monk, Rengert and Rengert, presented the workshop at the N.C.G.E. annual meeting. Several have referred other instructors to the modules. Lee has written a proposal to prepare a paper for the A.A.G. Resource Paper Series on the geography of women.

Momsen has taught Unit 4 in her new position at the University of Newcastle-on-Tyne in the U.K., and has referred project materials to faculty in the Open University in the U.K. Taylor has added Unit 5 to her course at Northeastern Illinois University. Libbee will have his guided design version of Unit 4 available at an Exxon sponsored workshop at the 1981 A.A.G. meeting in Los Angeles. These actions suggest that the pilot instructors will form a nuclear group for further dissemination.

Experimental Dissemination Workshops

The two workshops at geography meetings demonstrated both advantages and limitations of this approach to dissemination. Because college teachers are attending the meetings as part of their normal professional activities, funds do not have to be provided by the project to assemble the group. Costs of diffusion are thus born primarily by those attending or their institutions. A total of twenty geographers attended, who would represent a substantial number of students in introductory courses. This attendance is only a small proportion of the total number of people at each meeting, but there is strong competiton for audiences at such events where multiple sessions are held in each time slot. It is also likely, given the traditionally male orientation of the profession and biases frequently expressed, that some geographers would prefer not to make public appearances at a "Women's Session." In the case of the West Lakes regional session there was an unusually high attendance at the convention of geographers in business and government in comparison with the usual overwhelming predominance of college faculty because of a series of program sessions on applied geography at the meeting. Such a special focus can be expected from time to time at comprehensive

meetings and could similarly limit attendance in the future.

Each workshop was one and a half hours in length, so that those attending were able to develop some familiarity with the modules and complete questionnaires giving their reactions to them, and also give suggestions for future dissemination. In responding to the questions on the latter topic, they showed greatest preference ($\bar{X}$ = 4.55 on a scale where 5 = highly desirable) for publication of the modules by one of the professional geographic organizations (A.A.G. or N.C.G.E.) as a resource paper, special journal issue or in some other form which would be issued to the membership. This preference is hardly surprising, since such publications come at no cost beyond membership fees, or at low cost. Second preference was for reproduction by inexpensive means and sale at cost by mail. Least desirable option ($\bar{X}$ = 2.1) was as a commercial publication for the instructor who would reproduce necessary materials for students.

In considering diffusion mechanisms involving personal contact, preferences were slightly stronger for seeking funding to support workshops at which instructors could adapt modules to their own needs and contribute to developing additional materials, than for dissemination through special sessions at regular meetings, though those attending the N.C.G.E. session rated it effective ($\bar{X}$ = 4.2 on a scale where 5 = highly effective) as a means of familiarizing themselves with the modules. Two thirds indicated they would be prepared to attend such a workshop again. All would recommend it to a colleague. It would thus appear desirable to continue such sessions at conferences unless or until arrangments are made for low-cost publication. (Prices of $1.00 to $1.50 per module were suggested by participants as appropriate.)

The project directors' goal of seeing more materials produced and integrated into courses was also moderately well supported by those attending the workshop via their response ($\bar{X}$ = 3.8 on a scale where 5 = highly desirable) that it was desirable to seek funding for instructor participation in future materials development.

While the workshops were useful in providing a measure of this group of instructors' views on the suitability of the modules for their courses, they were too short in duration to permit participants to provide commentary of significant value in revising all the modules. Here the pilot instructors and the three final reviewers were more helpful, demonstrating the need for in-depth contact with materials over workshop survey responses for formative evaluation. The shortness of the workshop sessions also does not permit demonstration teaching of the modules. Such demonstration will influence decisions on whether to use the modules, and allow instructors more opportunity to identify needs for supplementary or modified materials. At the Chicago workshop where only three modules were used, and questionnaires not completed, time was available for open discussion which did help to identify important issues about the modules and introductory courses. There are relatively few such meeting sessions at which instructors can discuss their approaches and problems in teaching introductory courses, yet a need for forums for these discussions is recognized in the profession. Interest in such information exchange was evident at the workshops. The appreciation of this opportunity by those participating may enhance positive attitudes towards the new materials. Another limitation of the short workshop review is that participants could only indicate their likely future use of units, and we have no measure of actual use of the units following the meeting.

A further advantage of the use of workshops at annual and regional meetings for dissemination is the opportunity they provide for low cost publicity, to indicate the conern of some members of the profession regarding masculine bias and the need for new materials, and to show the support of the Association for educational equity. Program listings are read by all those attending, and the workshop titles and descriptions clearly identified the project's functions and the sponsorship of the Association. At the Annual Business Meeting of the Association, the Executive Director commented on the project, and a report was also made to the A.A.G. Council, the organization's governing body. Such announcements to the membership and leadership have yielded requests for materials by some geographers on the Council and by others attending meetings but not participating in the workshops.

Project Evaluation Methodology

In evaluating the project, it seems appropriate to comment on our perception of the adequacy of the evaluation design and data for our needs. In general, we consider the evaluation effort has met our needs, particularly since this is a relatively small scale, modest budget activity. The pilot teaching model permitted us to involve a modest but significant number of teachers in the project, and these people have demonstrated their willingness to go beyond the initial pilot teaching in several ways. The model also exposed the materials to students at eleven different institutions during the year, in some cases in more than one course.[1]

The commentary from these teachers and their students, and from the final round reviewers, as well as from participants at the regicnal and national workshops

[1]Use of materials by project staff and the final round reviewers is included here.

was regarded as highly valuable by the units authors as they undertook revisions. In fact, we have not identified single authors on the final modules, feeling that the products are truly collaborative efforts.

On the other hand, the evaluation has limitations.[1] The project evaluator was able to have in-depth discussions with pilot instructors, but more limited contact with students and workshop participants. Thus, as has been noted, questions about differences in student reactions have been raised but cannot be answered with any certainty from the data available. On-site evaluation, allowing direct observation of classes and conversations with students, would have been helpful, though beyond the budget. Likewise, follow up with instructors who attended the workshops would be desirable (to see if they use the modules) but is beyond the time-frame of the project.

Conclusions

As this project draws to a close, we ask ourselves: what has been achieved, what might we have done differently, and what should we do next?

We have described achievements in some detail in the preceding pages, but have a few summary and additional comments. Preparation of the modules has clearly allowed some instructors to include materials in their courses which offer new content and perspectives on women in introductory college geography. However, since most instructors can only use a limited number of modules, much of their teaching will be dependent on texts which continue to overlook women.

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[1] The absence of quantitative student evaluations of the final product is not seen by us as a flaw in the evaluation design. Our goal was to produce a quality set of modules working with a modest budget. Large scale evaluation by students of the final versions is beyond the scope of the budget.

The people who have worked with the project have increased their own knowledge about the geography of women, delved into new literature and widened their horizons. We have been pleased that pilot instructors have prepared supplementary materials, participated willingly in workshops, referred project items to others and continue their interest. We have been especially gratified by the support of the Education Affairs Director of the Association of American Geographers, Dr. Salvatore Natoli. As his "Foreward" in each unit notes "if one can measure the success of a project by the degree to which it raised my consciousness about the problem and enlarged my education, then we will be seeing a gender balanced geography in the not too distant future." In addition to helpful conversations with us about the project and preparation of the foreward, Natoli completed a detailed review of the second draft modules at no cost to project funds, and has introduced material about women into a course he is teaching as a visiting professor at the American University. We value this support and acknowledgement from a key figure in the educational leadership of the discipline.

When we consider the project in retrospect, we consider the single most important decision we made was to undertake this activity under the auspices of the Association of American Geographers, rather than as individuals or through a single institution. The Association sponsorship facilitates collaboration between geographers in a number of states and different kinds of institutions. It makes it easier to secure the participation of pilot instructors,and for them to legitimatize attendance at workshops and experimentation in their classrooms. Most importantly, it carries the unequivocal message to the profession that geographic curricula have a masculine bias and that now is the time to redress inequities. Not only did the Association contribute

by providing its central office services, but the Executive Director, Patricia McWethy, gave consistent and unquestioning support and has indicated her encouragement for future projects.

In developing the proposal for the project, we undoubtedly underestimated the amount of time necessary to prepare and evaluate the materials. To produce units of the quality we wanted, and to include features which the formative evaluation indicated as desirable, we have donated hours of time substantially in excess of those originally anticipated. We obtained a no-cost extension of six months, but the project could not have been completed without the donation of time by the pilot instructors as well as the staff, without the support services of the A.A.G. central office, and of secretarial staff at our institutions, in particular at the University of Illinois. Without detailed accounting, we suspect the actual cost of the project if fully financed, would be at least double the amount of the actual budget.

It is also clear to us that much remains to be done. Only 100 copies of the final modules have been printed. Further impact on the profession will require, we think, a two-pronged approach. Publication at low cost of the existing modules, and a project which will involve additional geographers in adapting these materials and creating new ones. We conclude that the project has been significant but is only a beginning. We hope that programs such as the Women's Educational Equity Act will continue to sponsor efforts such as those we have undertaken.

APPENDIX 1

Overcoming Masculine Bias in Introductory College Geography

Revised Evaluation Plan

Contract G007802252 between Association of American Geographers and U.S. Office of Education, Women's Educational Equity Act Program.

Project Director: Professor Arlene Rengert
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Associate Director: Professor Janice Monk
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Urbana, IL 61801

Overview of Evaluation Design

The goal of the project is to produce a series of modules which will increase and improve the representation of women in introductory college human geography courses. Such courses take a variety of forms, for example, general introduction to geography, in which human geography is assigned a course segment; social geography (taught predominantly from a social science perspective); cultural geography (taught primarily from a humanist perspective); and world regional geography. Instructors in individual colleges may have classes of several hundred students or classes of fifteen or twenty. Some teach by expository methods, principally in lecture classes, others by lecture-discussion, or various forms of individualized or small group strategies. The project aims to produce materials which will be attractive and useful in these diverse settings and instructional approaches.

The evaluation design has been constructed within this frame of reference. The sample of participant instructors includes various settings - for example, large state, graduate-oriented universities; undergraduate-oriented state colleges; city commuter colleges including minority and

mature age students; and small liberal arts colleges. The sample also includes instructors from various regional divisions of the Association of American Geographers to enhance subsequent dissemination via regional workshops.

Because of the diversity of settings, course content and instructional strategies, evaluation procedures and instruments have been developed separately for each setting, though with the objective of answering the set of questions identified in the attached project evaluation synopsis. The intent is to review the utility of the modules within the specific contexts.

The attached synopsis shows the evaluation design in two main sections, formative and summative. The formative is designed to provide feedback to module authors to enable them to revise draft versions of the modules and to review experimental workshops as a means of disseminating modules to college geography instructors.

The summative evaluation is designed to evaluate the quality of the revised modules with respect to their perceived utility for instructors introductory courses, their interest and value and their perceived contributions to increased understanding of women's spatial behavior and environmental relationships. The ultimate target population is the student in the introductory college geography course. However, the intermediate target, and primary focus of the project, is the college instructor. In this situation, the data collected from students is primarily to provide feedback for formative evaluation. Hence the evaluation design does not include pre- and post testing of student attitudes towards women or knowledge about the geographic study of women, or a comparison of control and experimental groups. Such measurement was considered

by project staff and participant instructors but rejected because of (1) the diversity of cases included in the pilot study militating against the use of standardized instruments; (2) the lack of suitably validated instruments for such purposes (various instruments were reviewed by project staff and participants); (3) the focus of interest on formative evaluation, and (4) the emphasis on instructors as the immediate target population.

In the evaluation design originally submitted in the project proposal a national survey was planned to assess instructor's receptivity to the modules. Formative evaluation data have caused the project staff to discard this strategy and substitute a dissemination workshop strategy. The latter appears to be preferable given the conservatism of the largely male geographic profession and their lack of knowledge of material relating to women as well as the diversity of instructional approaches used. A dissemination mechanism which includes personal contact with authors and male participant instructors together with the opportunity to examine materials and discuss implementation potentially seems more effective.

Overcoming Masculine Bias in Introductory College Human Geography Courses

Project Evaluation Synopsis

	Stage	Formative Evaluation Data Sources	Evaluation Questions
A.	Preparatory		
I	Topic selection	Notes from discussions between authors, project director and associate director	1. What criteria emerge in the selection process?
II	Module writing	Notes of discussions and correspondence between project director and authors	1. What problems arise during writing stage? 2. What resolutions are achieved? Why?
III	Selection of participant instructors	Letters and questionnaires from director to pilot instructors	1. Can instructors be obtained who will meet criteria outlined in proposal (with respect to region, college type, course organization, varying degrees of experience with content related to women etc.)?
IV	Workshop for participant instructors	1. Taped or phone interviews between associate director and participant instructors 2. Notes by pilot instructors indicating initial reactions to each module 3. Notes by director of detaled group review of each module. 4. Notes by director on participant instructors reactions/suggestions to alternative methods of evaluation	1. Is there preliminary acceptance of some module materials by all participant instructors? 2. What additional needs do participant instructors express? 3. What modifications to modules tentatively appear warranted? 4. What evaluation instruments will be acceptable to/needed by participant Instructors? a. for their own use? b. their students' use?

Stage	Formative Evaluation Data Sources	Evaluation Questions
	5. Observations and discussions of participant instructors reactions by director and associate director	
B. Pilot Teaching		
I Teaching	Phone conversations with instructors regarding additional needs, adoption decisions, scheduling problems	1. Which modules do instructors select? 2. What modifications do they make to modules to adapt for their own use? 3. What additional materials are requested?
II Evaluation	1. Phone conversations between associate director and instructors regarding implementation problems 2. Written reports from instructors on their reactions to modules and suggestions for modifications 3. Written reports from selected group of student evaluation consultants 4. Questionnaires (qualitative and quantitative items) to students completing modules 5. Notes of mid-period meeting between participant instructors and authors to review student and teacher reactions, need for modifications, adaptations adopted	1. What weaknesses do instructors & student consultants identify in materials? 2. What strengths do instructors & student consultants identify in materials? 3. What modifications are suggested? 4. How do reactions vary between classes? 5. What are the implications of these differences and simularities?

Stage		Formative Evaluation Data Sources	Evaluation Questions
C.	Module Revision		
I	Preparation of new and/or deletion of old material	1. Analysis of instructor and student responses to data collected in Stage B. 2. Questionnaire to participant instructors	1. What modifications should be made to materials? Why? 2. Do revised materials deal with problems noted in Stage B? 3. How do participant instructors rate the completed modules for their utility, interest, appropriateness of level, and enhancing the representations of women in college geography?
D.	Experimental Dissemination		
I	National workshop	1. Interviews with participant instructors leading workshop 2. Notes by director & associate director 3. Questionnaires to participants attending workshops. i) at workshops, ii) post conference 4. Questionnaires to human geography instructors attending conference but not participating in workshop	1. What do leaders identify as strengths and weaknesses of workshop materials and format? 2. What do participants identify as strengths and weaknesses of workshop materials and format? 3. How should future workshops be modified in the light of 1 & 2 above? 4. How might workshops be publicized to attract additional participants?
II	Regional workshop(s)		

Stage		Summative Evaluation	Evaluation Questions
A.	Preparatory		
I.	Topic Selection	Responses to questionnaires and reports from participant instructors, student evaluation consultants and students.	1. Are the topics evaluated as a. interesting? b. appropriate for introductory human geography? c. Increasing insight into women's spatial behavior and relationships with their environment? 2. Are the criteria used in the selection of topics validated by the responses of participating instructors and student evaluation consultants.
II.	Module Writing	Responses to questionnaires and reports from participating student evaluation and students.	1. Do teachers and students in pilot institutions evaluate modules as a. interesting? b. appropriate for introductory human geography? c. worthwhile teaching and learning materials? d. Increasing insights into women's spatial behavior and relationships with their environment?
B.	Participant Instructors and Pilot Teaching	1. Review of reports and interviews completed by participant instructors. 2. Observations by project director and associate director.	1. Were participant instructors able to produce useful commentary on modules? 2. Are participant instructors prepared to continue incorporating modules in courses? 3. Are participant instructors prepared to develop additional

Stage		Summative Evaluation	Evaluation Questions
			instructional materials related to modules or other topics improving equity for women geographic education?
C.	Experimental Dissemination Workshops		
I II	National Regional	1. Observations by director & associate director on interest initiative and willingness of participant instructors to be involved in workshop leadership 2. Responses to questionnaires and review of notes and interviews outlined in Formative Evaluation D I.	1. Are participant instructors prepared to assume significant roles in dissemination? 2. Do workshops attract a significant number of college (or other) geography teachers? 3. Are attendees at workshops prepared to adopt modules for their own courses?
D.	Project Evaluation	Review of project evaluation mechanisms outlined above	Are evaluation data useful for 1. revising project materials 2. assessing impact of modules on sample population 3. assessing the efficacy of the workshop strategy as a dissemination mechanism
E.	Project Approach	Review of responses from participant instructors and those attending workshops	Is module approach a viable method of introducing content about women in introductory geography courses?

APPENDIX 2

SAMPLE STUDENT EVALUATION QUESTIONNAIRES

Overcoming Masculine Bias in Introductory College Geography Courses

Evaluation Consultant Report

Consultant Name _____

Year in College _____

Major _____

What other geography courses have you taken?

What women's studies courses have you taken?

1. Please rank the modules in order of preference (1=high)

   Woman's Role in Changing the Face of the Earth _____

   Choosing a Day Care Center _____

   Unanswered Questions: Migration of Women to Latin American Cities _____

   Women in Crime _____

2. List the criteria you used in developing your ranking? (e.g. interest, difficulty, novelty, inclusion of exercises, feminist perspective etc.)

3. Rank order the importance you attached to each of the criteria you mentioned (1=high). You may wish to rank some criteria of equal weight, but if you can differentiate between them, please do so.

4. What did you like most and least about each of the modules?

Women's Role in Changing the Face of the Earth

Most Least

Choosing a Day Care Center

Most Least

Unanswered Questions: Migration of Women to Latin American Cities

Most Least

Women in Crime

Most Least

5. In what ways do you thinkeach module should be changed? (e.g., material dropped, readings added, instructions revised). Try to be specific.

Women's Role in Changing the Face of the Earth.

Choosing a Day Care Center

Unanswered Questions: Migration of Women to Latin American Cities.

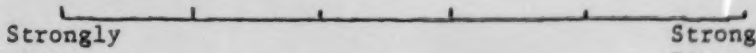
Women in Crime

Any further comments:

Evaluation of Guided Design Unit Day Care Center

A. Please rate the unit on the following scales. Mark an X in the space which best represents your opinion.

1. I found the unit interesting

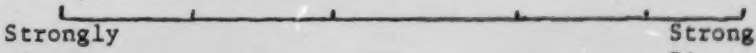


Strongly Agree — Strongly Disagree

2. I found the unit worthwhile

Strongly Agree — Strongly Disagree

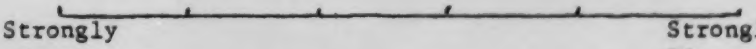
3. The unit gave me new insights into the problems faced by women.



Strongly Agree — Strongly Disagree

B.

1. The "instruction" sections of the unit need revision.



Strongly Agree — Strongly Disagree

Please suggest the kind of revisions you think are needed.

2. The "feedback" sections of the unit need revision

Strongly Agree — Strongly Disagree

Please suggest the kind of revisions you think are needed.

3. The Hopgood reading "Day Care Centers" is appropriate for the unit.

Please indicate any problems you had with this reading.

4. The Palm and Pred Reading on time geography and American women is appropriate for the unit.

Please indicate any problems you had with this reading.

5. The information on"Working Mothers and their Children" is appropriate for the unit.

Please indicate any problems you had with this reading.

6. The data on Champaign-Urbana (maps, dacare data etc.) were appropriate for the unit.

Please indicate any problems you had with material

Please identify if you are male _____ or female _____.

Evaluation of Day Care Center Exercise

A. Please rate the unit on the following scales. Mark an X in the space which best represents your opinion.

1. I found the unit interesting

Strongly Agree					Strongly Disagree

2. I found the unit worthwhile

Strongly Agree					Strongly Disagree

3. The unit gave me new insights into the problems faced by women.

Strongly Agree					Strongly Disagree

B.

1. Please check if you read the article by Palm & Pred on time Geography and the status of American women.

_____ yes _____ no

2. If you read the article please answer the following:

a. I found the article interesting

Strongly Agree					Strongly Disagree

b. I found the article useful

Strongly Agree					Strongly Disagree

Comments on the article: (Did it present any particular problems?)

3. You received a one page discussion of the concepts of equity and efficiency. Please answer the following:

   a. The discussion of the concepts is clear

   /_____/_____/_____/_____/_____/_____/

   Strongly Agree — Strongly Disagree

   b. The material is useful background for the exercise

   /_____/_____/_____/_____/_____/_____/

   Strongly Agree — Strongly Disagree

Please suggest any changes you would like to see in this reading.

4. You were given a description of the community of Champaign-Urbana. Can you suggest any changes which would make this description more useful in doing the exercise?

5. You were given three case descriptions of Champaign-Urbana residents to use in the exercise. In what ways do you think any of these descriptions needs revision?

6. What did you think were the strong and weak points of this unit on day care?

   Strong Points — Weak points

Please check if you are ____ male, ____ female.

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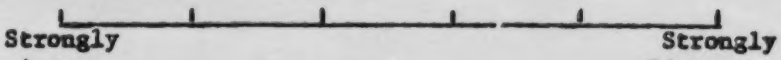
Evaluation of Migration Role Playing Exercise

A. Please rate the exercise on the following scales. Mark an X in the space which best represents your opinion.

1. I found the exercise intersting:



2. I found the exercise worthwhile:

3. The exercise gave me new insights into problems faced by women:

B. The material noted below was placed on reserve reading:

a. an extract from Congressional testimony including description of the case of Hermalinda

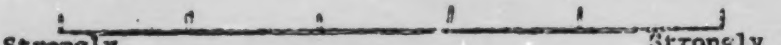
b. an article on migration of women to Latin American cities.

1. Please check if you read item a _____, item b _____

If you read either item please answer the following:

2. I found item (a) interesting:

3. I found item (a) useful:



Comments on item (a):

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4. I found item (b) interesting:

5. I found item (b) useful:

C. Please add any comments on how you would like to see this unit changed. What do you think was its best feature? Its worst?

D. Please identify if you are male _____ or female _____.

APPENDIX 3

FORMATIVE EVALUATION REPORTS TO MODULE AUTHORS

"Overcoming Masculine Bias in Introductory College Geography"

Formative evaluation of module by B. Loyd
"Women's Role in Changing the Face of the Earth."

Prepared by
Janice Monk
Associate Project Director

Project supported by U.S.O.E. - W.E.E.A. Grant G007802252 to the Association of American Geographers.

August, 1979

Contents

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B. Author's text	2
C. Readings	4
D. Exercises	8

A: Market

The module is principally seen by participant instructors as useful in schools where the instructor is oriented to the cultural geographic tradition. We have no good way of estimating the extent of this clientele. However, the module was tried by three of the eight participant instructors, and would have been applicable in a course taught by a fourth. Of the pilot instructors using the module, one taught a course with an entirely cultural focus, the other two were more broadly based - "Introduction to Geography" which included physical, economic and cultural segments, and "Human Geography" which included social and cultural approaches.

The module was not picked up by instructors with a strong social science orientation in their courses, or by those with a highly structured (e.g., guided design, or audio-tutorial approaches). The latter audience might be reached if we included some more structured exercises rather than only reading materials and general discussion or project suggestions. Jim Landing (at Chicago Circle) included in a questionnaire to students a listing of all four module titles and asked students whether they would like to see material of this kind in an introductory geography course. Response options were "yes" or "no". Eighty-two percent of the men (N=28) and 87% of the women (N=15) responded favorably, a substantially more positive response than recieved by any of the other titles. They also rated the module highest in interest ($\bar{X}$ = 3.7 (men) and 4.3 (women) on a 5 point scale where highest interest=5). The Florida group working with the "Women in Architecture and Planning" segment responded favorably with respect to an overall rating of the module (4 on a 5 point scale where 5 = excellent). The two groups in Florida working with the historical materials did not return an evaluation, but David

Lee's commentary (see attached) indicates that one group with anthropological background put out a good effort in developing a project which used the materials as a base. The other group performance was weaker. This may be a reflection on the differential student background, ability and interest, rather than an evaluation of the materials.

I would conclude that we can assume the module has an adequate market and make the following recommendations:

1. In dissemination efforts we should identify in an overview statement to the entire module set that this module is most suitable for cultural geography courses or courses which include cultural geographic concepts. We might also wish to key it to those texts which include such material. Here an index which Michael Libbee has volunteered to develop would be useful.

2. We should try to develop some structured exercises for the module to meet the needs of instructors with such orientations. (See below for suggestions)

B. Author's Text

Evaluation data are largely from the participant instructors, though see also Jim Landing's report based on a series of discussions he had through the term with four women students. The main issue appears to be the desirability of taking an overtly feminist stance vis-à-vis writing about women or implying social changes for both men and women. In reviewing the four modules, instructors saw this one as most feminist in its treatment, the Latin American module as one about women rather than men, and the day care as a unit implying men's lives should be/are changing too.

The concensus among instructors appeared to be that overt feminism should be played down, given the conservatism of the geographic profession and the predominance of male instructors. (One of our pilot instructors who appears to be most conventional, questioned why he would ever teach the material.) However, this view is not universal. Student evaluation consultants (women) from Florida and Chicago Circle list feminist perspective as an important criterion in evaluating the module. (One rates this first in importance, another third). The Chicago Circle discussion group included one student who felt that treatment of women as homemakers perpetrated a stereotype and should be avoided. Rather there should be more emphasis on women as "movers and shakers". (See Landing report).

The comments from the larger Chicago Circle class are difficult to interpret, and I include them verbatim for your reference. They seem to suggest an emphasis on contemporary changing roles for women.

Another major question is whether to treat this as one module or divide it in two. Compared with the others it covers much more ground, and appears as if it could be integrated into different segments of courses. Also, the male and female space segment, and possibly the architecture and planning segment, have appeal to social geographers teaching about "space" but not "place". The Florida group treated the module as two subunits (see Lee report). On a more specific note, one suggestion was to identify each segment by separate pagination 1:1, 2:1 etc.

Some Specific Suggestions for Text Revisions

The title of the module should be changed. Some felt the play on Thomas' book title was an inappropriate play on words. Others that it did not adequately describe the whole module. Some suggestions made: "Women as Agents of Spatial Change", "Women's Impact on the Earth", "Women, Space and Place". The instructor group was not too satisfied with any of these,

and thought you might have better ideas.

2. Specific pages where it was suggested feminism be down-played or language changed. Page 7: Some thought it inappropriate to describe the female having "interior space" and the male with a "penis". I assume they think parallel vocabulary would be more clearly non-sexist.

Page 7, paragraph 2, line 2: delete reference to feminists.

Content Additions

3. Page 23, paragraph 2. Roger Miller noted Catherine Beecher's writing on the relationship between housing design and women's role as a moral force in the home, perhaps going beyond your interpretation . He specifically referred to her Treatise on Domestic Economy. Roger also made comments on the impact of technology on women's lives and changing socio-economic opportunities. It might be helpful to discuss the module with him, since he is the most familiar with your content among our group (office phone 303-492-8630; Home 303-665-4247).

C. Readings

The reading package was overwhelming for most participant instructors. It was suggested that new teachers particularly would benefit from more "how to use the material" and less material. There could also be cost and copyright problems, plus difficulties with new xerox regulation in arranging library reserves. A recurring recommendation is to prepare an annotated bibliography for the instructor. This would need to be written in such a way as to point up the teaching relevance of the item as well as summarizing its content.

Specific Readings

Students at Northeastern were requested to keep a reading log and turn in commentary to Lowry Taylor. The following responses were reported on an evaluation form (Lowry did not include all the readings in the module and also had a number on women and development from another segment of her course which students were also free to choose).

Reading:		Times Chosen
Sauer:	Fire & Early Man	19
"	Seashore: Primitive Home of Man	12
"	Early Relations of Man to Plants	8
"	Sedentary & Mobile Bents in Early Society	10
Murphy & Murphy	Women in the Forest	16
Douglas	Rules & Meanings (I interpret this to be Bourdieu's piece on the Berber house)	4

(No. of students in the class approximately 40)

I cannot fully compare these choices with other items on her library reserve list because not all are identified by title. However, it is clear that many more students selected the module items than articles from Lanegran and Palm's Invitation to Geography:

e.g.	Pyle, "Diffusion of Cholera"	1
	Skaggs, "Paradise Lost"	4
	Rooney, "Up from the Mines"	0
	McColl, "Vietnam, Cuba & the Ghetto"	2
	Lanegran, "Where is Everybody?"	5

Other items on the list dealing with women were also chosen reasonably often: e.g., Little, Women in African Towns South of the Sahara (8), Elmendorf, Dilemma of Peasant Women (8), Mermissi, Moslem World: Women Excluded from Development (8), Boserup, Women's Role in Economic Development (12).

Only three other items were chosen with comparable frequencies - Abu-Lhugod and Hay: Third World Modernization (12); and Rapoport, House Form and Culture (21) and Dohrs and Summers Cultural Geography (13).

One can hypothesize that the selctions on women had particular appeal to the class. Lowry did note that her married women students all chose "women's items". However, we need to discuss with Lowry in more detail how all the readings selections dovetailed with her in-class treatment and examine the comparative lengths and difficulty of items as well before concluding that the material on women was more attractive per se.

Some readings were evaluated by Lowry's students for "interest", "usefulness" and "providing new insights" into the roles and problems of women with the following results:

Item	No. Read		Interesting		Useful		New Perspectives	
	M	F	M	F	M	F	M	F
Sauer: "Early Realtions..."	3	4	3.3	3.0	3.3	3.25	3.0	2.5
" "Envir. & Culture..."	4	7	3.5	3.0	2.25	2.7	1.3	1.8
" "Fire & Early Man..."	7	7	4.4	3.9	4.0	3.7	2.1	2.1
" "Seashore ..."	4	6	4.3	3.5	3.5	3.5	2.0	2.3
" "Sedentary..."	2	3	3.0	2.0	5.0	2.0	2.5	2.0
Murphy Y & R "Women..."	2	3	3.5	3.3	4.0	3.7	4.0	3.7
Bourdieu "Berber House"	1	0	3.0	-	3.0	-	3.0	-

*Scale 1-5 where 5 = strongly agree.

The samples are so small I am hesitant to draw any generalizations. Yet I think there are some interesting points which might be followed up between us and with Lowry. The readings were chosen more often by women than men (30 F: 23 M), however, the men may have found them more interesting and useful. The items did not contribute much to new perspectives on women's roles and problems (see Jim's commentary also), with the possible exceptions of the Murphy's item. The range of male responses was greater than the female range on this question, and actually more men (8/20) gave positive responses (4 or 5 on 5 point scale) than women (only 4/30). In general, women did not think they gained any new insights on women's roles and problems from the Sauer articles. Perhaps this reflects the historical

content of the material and women interpret the question in contemporary terms. Nevertheless, it would be interesting to pursue in future male versus female reactions to Sauer's ideas.

Other specific comments about the readings: First, Jim's, small discussion group was enthusiastic about Mary Crawford's article which Arlene added to the module. Would you review it and see if you think it might be an appropriate or more desirable reference than others for student reading.
Second: A student from Florida made the following suggestions for readings: "Planning, Women and Change", Planning Advisory Service Report #301, April 1974 and "Profile of Women in Planning", Planning Advisory Service Report #273, October, 1971. Could you check these?
Third: There was some commentary that the Sauer articles require some background which students do not have, or else deal with specifics which are beyond them.

Based on the limited data, I would recommend.

1. Preparation of a pedagogically oriented annoted bibliography.
2. Careful review of the Sauer items in conjunction with the text. I think our goal is to change men's attitudes as well as women's and we may be on that track. However, women need to get a better understanding of their roles and problems from the module, including any associated readings. Perhaps we should stress more the difference between Sauer's interpretations and alternative views, and thus emphasizing historical contributions by women which are usually overlooked. (This may appear contradictory with earlier comments on down-playing feminism but the issue is content rather than language here.)

In the sections on male and female space, women in architecture, and the home landscape it might be advantageous to include some contemporary

or future oriented material as well as historical to deal with the concern that the module treats women in their conventional roles. At least some questions could be raised about the implications of social change. It might also be desirable to change verbs from present to past or perfect tenses (e.g., in the introduction page 2 "women's activities take place indoors"), or to indicate in a general way what time and cultures we include.)

D. Exercises

In the proposal, exercises were primarily to be my responsibility. As it turned out, our need for modules and time constraints saw me writing almost all the day care module and doing some of the work on the migration one. Hence, I did not get to the "Women's Role" module. Also, Arlene and I thought it might be appropriate to have modules intially presented with different formats to test instructor reaction, so we thought there was a reason to leave this module with brief suggestions rather than more developed activities.

As noted above, the response from instructors and student consultants indicates a need for more fully elaborated exercises.

Suggestions

1. I have enclosed an activity prepared by David Lee which might be used or adapted for the "Female and Male Space" segment. We should all review this and also discuss with David his assessment of student performance and reaction to it. He is willing to develop it into a handout for the Mexico City workshop, so I think it would be appropriate to tie it to a module. My initial reaction is that it might be desirable to give more than one case household, with different groups in the class preparing logs for each. Discussion could then focus on differences in activity space when men and

and women adopt different roles. The sexes of the children might be specified, or at least the students led to discuss differences if the children were of different sexes.

2. David's report notes two student research projects. We might be able to set up some research/discussion questions for the historical material and key the existing readings to them, so that instructor's would be aided in developing take home reading/research projects related to the module.

3. One of the Florida student evaluators suggested that guidelines be provided for interviews in the assignment "interview an architect." Could you work on expanding that? This would not be a project a whole class could undertake, though it might be possible for an instructor to bring an architect to class for an interview/discussion, in which case some we might suggest to the instructor copies to pursue in such an interview.

4. One of David's students explored women's spaces in a hairdresser's and maternity shops and compared this with masculine spaces. This seems to have potential to expand into an exercise developing observational skills which would not be hard to set up. What do you think?

5. The participant instructors at the workshop in Urbana produced a few other ideas for exercises. Discussion centered on an idea of analyzing housing (especially apartment) advertisements to see if males and females had different preferences and why. We did not take a set of advertisements to see if this were feasible. A preliminary analysis should establish this if you feel inclined to do it.

6. Most of these suggestions involve open-ended projects and ones where students collect or provide data. I think this is probably the most approriate for cultural subject matter. However, I think we should consider the

possibilities of an exercise where we provide the materials - e.g., analysis of photographs of interior spaces, or analysis of data from Sue and Perry Hanson's paper on daily travel patterns of Swedish men and women, if they are willing for us to use it in some way.

OVERCOMING MASCULINE BIAS IN INTRODUCTORY COLLEGE GEOGRAPHY

Formative Evaluation of Module by G. Rengert

"Women in Crime"

Prepared by Janice Monk
Associate Project Director

September 1979

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A. Market: The unit was used by two of the participant instructors. Both of them have a cultural geographic orientation in their own work, though one was teaching a general introduction to geography (physical/economic/cultural). However, their adoption should be seen in light of their decision to try all four modules, rather than the materials appeal only to introductory courses with a cultural orientation. One other instructor with a cultural orientation suggested that appeal to this audience could be enhanced if the module were expanded to include a comparison of women in crime in the 19th and early 20th centuries. Source material may make this a difficult suggestion to pursue.

Why didn't the others adopt the module, especially those with social science orientations? This question was not posed directly to instructors, but some tentative answers can be drawn from their initial reactions, the reactions of those instructors and student evaluation consultants who did use the module, and the Chicago Circle students who were asked if they would like to see such material in an introductory geography course. The following appear to be important considerations (no order of importance should be inferred).

1. The topic of crime is seen as peripheral to basic geography courses.
2. Crime is seen as the domain of sociology (or social work or criminal justice).
3. The geography of crime is not yet well developed enough as a field to offer important insights which might add to treatment from these other fields.
4. The instructors don't know much about the topic themselves and can't easily go beyond the information provided (though this reservation would surely apply to almost any treatment of women).

5. The module does not offer sufficient insights into the problems faced by women.

6. Even though this is a "mini-module," instructors still felt the need for more data, more concepts and more extensive and/or difficult exercise(s).

To balance these negative reactions is the view that the topic is inherently one to attract student interest and will appeal to instructors who want to give a contemporary problems orientation to the introductory course. In fact, students at U.I.C.C. rated the topic second in answering the question about whether the topic should be taught. (Males 46% 'yes', 54% 'no', females 53% 'yes', 47% 'no'.) Their evaluation of interest in the module as presented to them rated $\bar{x}$ = 3.14 (m), S.d. 1.27, and $\bar{x}$ = 3.4 (f) S.d. 1.24 (1 = low interest, 5 = high). These ratings place the module second for men and third for women.

One instructor expresses the ambivalency about the module thus:

> "The paradox was recognized, that is the fact that a unit on crime seems to be an excellent motivating arena for airing female problems, full of social pathos, heart-rending empathy, etc. However, none of the materials set forth, including the unit, the quotes from books, and selected supporting articles seemed to provide any type of thrust that would lend support for a recommendation that the unit be presented."

From the limited data I would conclude that as it stands, the module is the least likely of the set to be adopted, but that interest is such that it warrants revision, though this will be a substantial task.

B. Text: The main reaction to the text was that geographic concepts should be stressed more. Suggestions include:

1) The geographic material should come nearer the beginning of the module.

2) The module could be presented in the context of spatial behavior, with crime as an example. (Suggested title "Spatial Behavior: the example of crime.")

3) Concepts which emerge from the readings and which might be further developed include distance decay, ecological area, paths and nodes.

Another recurring reaction to the text was that it needed more statistics and/or maps to illustrate crime patterns. Suggested were:

1) Categories of crimes by sex.

2) Changing crime patterns overtime (by sex or for women).

3) Places at which crimes occur (? by sex).

4) Times at which crimes occur (? by sex).

5) Socio-economic data on women criminals compared with the total female population.

The Philadelphia data in your accompanying reading might provide some suitable material. Another suggestion was to give data for a hypothetical middle-size city. This might be useful for discussion or exercise purposes (see below).

There are a few specific editorial changes noted:

p. 1. line 8 should read "heinous"

p. 2. line 17 "To be successful....." One instructor could not follow this sentence. The only problem I can see is the use of the singular "has" instead of "have".

p. 4. third line from bottom; should be "criminologists".

It was also thought the newspaper item on Patty Hearst might date the module and be atypical.

C. Readings: There were not many comments on the readings. They included:

1) Try to find something more up-to-date. I assume this comment refers primarily to "Sisters-in-Crime." The data and writing style put it in the early seventies. Also, it does not have a geographic orientation

and lends support to the assessment that the module is really a sociological topic.

2) Better referencing is necessary. I think this must refer to the referencing you noted on the items themselves, since you have full references on a cover sheet the instructor must have overlooked. However, I think the references made within "Sisters in Crime" are not traceable.

3) The maps in your article on Philadelphia did not xerox well. Depending on your revisions of the text, it might be useful to have these reprinted from originals if you still have them.

4) Bibliography: Because of printing and copyright problems it seems desirable for us to prepare annoted bibliographies rather than reproduce readings. I have suggested this to Bonnie. The most appropriate style might be a paragraph or two summarizing the substantive content, together with commentary on their teaching utility.

D. Activities: The general view was that the activity was too short and not challenging enough. There were several suggestions for expansion or supplementary activities, though all ideas are rough and some appear more feasible (and geographically appropriate) than others.

1) Introduce some additional constraints or variations into the city used in the exercise. This might be the easiest to do. The models proposed in the Brantingham's paper would provide a good basis, and also allow the activity to be tied to other geographic concepts—e.g. urban form models.

2) Set up a hypothetical middle-sized city and assign it a police force of a particular size. (You might need to draw on some statistics to describe the city.) Get the students to develop a plan for spatial deployment of police. [Q: Would this bring in sex difference material adequately?]

3) Set up a role playing—e.g. juvenile court to review cases, or panel of experts on crime to discuss changing crime patterns. [Q: Some doubted whether students could identify sufficiently with roles of burglars, police, etc., to make a successful role playing exercise.] Also, we have role playing in other modules, and it might be redundant.

4) There were several inconclusive suggestions about use of rape statistics. Michael Libee may have some for Norman. However, I think some reservations were expressed about rape data. (My notes are not helpful here—it may have been commentary from Perry Hanson or from you at the Philadelphia meeting.) In any case, rape introduces the question of the female as victim, rather than as criminal. Yet it might also be linked to changing female spatial behavior, if women are moving more independently and at night. If a spatial behavior theme were adopted with crime examples, rape might be a feasible topic to introduce.

Some Further Reflections:

1. We should consider carefully the conceptual overlap between this module and Bonnie's material on male and female activity spaces. In a project which has only a few modules, we should be careful to tie our material to a range of geographic concepts and not be repetitious. Although this module and Bonnie's might appeal to different audiences, the overlap seems to strengthen the case for introducing other concepts in addition to awareness space in this module. Alternatively Bonnie may wish to stick more to the landscape theme and play down activity spaces. You might consult with her.

2. The goals of the project should be considered. In increasing educational equity for women we might do some combination of the following: 1) introduce material about women; 2) adopt a feminist perspective; 3) point out the kinds of social problems confronted by women; 4) try to change men's and women's attitudes about women's roles and contributions. There may be other ways of defining our goals. To which goal does this module (and the others) contribute? Some might argue this module does not help women enhance their status or contribute to understanding the problems they confront. It explains aspects of the spatial behavior involved in crime, but does not do much to explain causes of crime in geographic terms, or help with solutions (unless we adopt some activities about police work). We should not necessarily only deal with positive aspects of changing roles for women (in fact Hermalinda and day care both point to problems associated with change), but do we want to be facilitating conservative views such as "liberating women turns them into bank robbers?"

3. Some of our modules deal with women, some with feminist interpretations, some with changing family roles and responsibilities. Would it be appropriate to have this one aimed mainly at showing sex differences, some of their causes and directions of change, rather than emphasizing women? Would this be contributing to equity?

4. One student reviewer suggested a wider theme "Women and the Law." Could this be done in a module which is not too conceptually disjointed? We have access to a paper on laws relating to women and to another on correlates of passage of ERA. Both are national studies aggregated at state level analysis. Would it be possible to tie all three together in a module which examines spatial patterns at various scales [e.g. regional, state, intra-city] and asks students to generate explanatory

hypotheses? Would crime be too far removed topically from the other legal issues? Are the legal issues in the domain of political geography and crime of social geography? In the social arena if we stick with spatial behavior would we want to expand the crime theme to incorporate some of Symanski's data on prostitution (Restrictions on their territories, their mobility, etc.).

Appendix 4

Day Care Center Guided Design Package

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This package was developed primarily with support from the grant "Guided Design in Geography" from the Exxon Education Foundation with supplementary assistance from the W.E.E.A. grant to the Association of American Geographers "Overcoming Masculine Bias in Introductory College Geography: A Module Approach."

Day Care Center Guided Design Package

The guided design package "Day Care Center" involves students in the problem of deciding where to locate a new day care center in a medium sized city. During the process of solving the location problem students must use census and survey data to estimate the demand for day care, and then estimate that amount of the demand that is satisfied by the existing centers. Once the students map both of these factors they must decide where to locate the day care center. The exercise is a good one for attempting to develop decision making skills in a spatial context, and for providing an initial introduction to the use of mapped data in locational analysis. Major objectives for the unit are that students will be able to:

a) describe major factors influencing the location of a service activity such as a day care center.

b) to create a system for estimating spatial variation in the probable demand for a service.

c) make a decision about the possible locations for a economically viable day care center given a variety of mapped information.

Suggestions are made in "Notes to Instructors" about possible extentions of the basic package to include time-space budgets, more sophisticated locational decision making, or non-economic factors in the decision making process.

The package, in its present form, should take students six to eight class hours to complete, working in groups of four to seven students. The package is organized into the following steps:

1) Introduction/state goal
2) Redefine the problem
3) Gather information
4) Gather information/identify facts, assumptions, constraints
5) Gather information/organize data
6) Generate possible solutions
7 Evaluate solutions/make a final decision

Permission is granted for reproduction and revision of this material for use in classroom situations.

One of the advantages of guided design is its flexibility. Given the basic guided design package, there are several modifications that individual instructors can make to help the existing package fit into their course.

a) In the enclosed package, students are "given" constraints about the type of day care center they will create in order to focus their efforts on the location decision. Material is available in the pamphlet "Day Care Centers" by Karen Hapgood (American Society of Planning Officials, Planning Advisory Service, Report No. 107, 1971) about different options for day care centers and the cost of each option. Another option might be to include information about rental rates in different parts of the city.

b) The package can be modified to focus on time-space budgets. Material about bus routes is included in the existing package, but not specifically used. Linked with an article about women's time-space budgets (for example Allen Pred and Risa Palm, "The Status of American Women" A Time-Geographic View" in Lanegran and Palm, Invitation to Geography (New York: McGraw Hill Book Company, 1978), the emphasis of the package could shift to more of a focus on individual decision making. One option would be to have students in different groups work with making a better estimate of the drawing area of day care center based on time-space budgets for different "prototype" women.

c) As a homework assignment students could be asked to do some more sophisticated locational decision-making. Such an assignment might be linked with reading chapter 9 "Locating Human Activities", or chapter 14. "The Question of the Best Location", in Abler, Adams, and Gould, Spatial Organization: The Geographer's View of the World, (Englewood Cliffs, N.J., Prentice-Hall 1971), or perhaps with Gordon Fielding, Geography as a Social Science (New York, Harper and Row, 1974) chapter 5 "The Economic Process" pp. 108-124.

d) A fourth option is to focus on efficiency, equity, and non-economic factors in the decision-making process. Our experience is that while there are several places a day care center could economically be located, students will often select the locations that are in white, upper-middle class neighborhoods. In the follow-up discussion of the exercise (or in an added step) the implications of their unstated assumptions and prejudices can be discussed. Another possibility would be to have some groups work through the problem with the goal of finding the best location for a publicly sponsored day care center.

Guided design was developed by Charles Wales and Robert Stager as an instructional technique that would provide a framework for teaching subject matter and for fostering the development of problem solving skills. For the past several years the Exxon Foundation has been sponsoring workshops as part of its Impact program in an attempt to diffuse the strategy into higher education. The package presented here is a spinoff of that program. If you are interested in further information about guided design contact Charles Wales, Freshman Engineering, West Virginia University, Morgantown, West Virginia 26500.

Feedback 2: Redefine the problem.

After some discussion the group decided that the problem was to identify an economically feasible location for the type of day care center they want to set up.

Instruction 3: Gather information

"By defining our problem this way, we've also stated our goal," said Jan

"Right," said Don, "And now we need to gather some information. One of the important kinds of information we need is information about the kinds of general characteristics that would tend to determine a good location for a day care center."

"Right," responded Jerry. "Let's review the reading we've done and generate a list of factors that are important in selection of a site for a day care center."

Read Hapgood Day Care Centers and generate a list of factors that should characterize the location of a day care center. (pages 8-12).

Excerpted from Karen E. Hapgood, Day Care Centers, American Society of Planning Officials, Planning Advisory Service, Report No. 107, 1971. 8

Demand/Supply

Persons responsible for the planning efforts must first ascertain the potential number of users of day care services--in other words, the total number of preschool children. If services are to be provided for all age groups, estimates will also have to be made of the numbers of infants and school-age children. An estimate must then be made of the proportion of the total number who might use day care services. A comprehensive survey would, of course, require data collection on a regional or metropolitan basis. Frequently, however, a demand study would be limited to a particular city or neighborhood within a city or to a particular target population, such as welfare mothers, migrant workers, or union members.

Since not all children of working mothers would be potential users--some mothers will have established satisfactory child care arrangements and not need day care services--it would probably be useful to conduct a survey of a sample of families to determine the amount of interest in day care. This kind of survey should, of course, be designed to elicit response in relation to the variables of distance (a block away, one-half mile, one mile) and cost (free, $10 per week, $30 per week).

Another indication of potential demand would be the experience of established centers. Is there a waiting list for enrollment, or must they advertise to meet full enrollment?

* It is possible, but unlikely, that the demand (need) for day care facilities will diminish. The fluctuating labor market could signal a drop-off in numbers of women in the labor force. The tight labor market has been a major reason for the entry of industry into the day care scene in recent years. If the labor market loosens up for a substantial time period, industry may discontinue or lessen its involvement with day care programs.

On the other hand, mere availability of day care services may generate further demand. Just as the building of highways has stimulated more auto travel (much to the embarrassment of transportation planners, who in past years consistently underestimated demand), the development of day care centers could have a considerable impact on presently unidentified demand. For the same reason, the survey suggested above should also try to determine, so far as possible, the alternative child care arrangements of families in the study area.

Once the potential demand is researched, the already available facilities must be determined. Few day care facilities exist in most communities. The agency responsible for licensing day care centers or nursery schools will be able to provide precise information. Usually the agency in question will be either the state's department of health or social services (welfare). The local welfare council will be another good resource for this information.

Required standards for construction, operation, and location of day care facilities are found in applicable state and local legislation. In addition, when federal funds are involved, a day care center operation must comply with federal requirements laid down in 1968, the result of the work of the state day care advisory committee established by the 1962 amendments to the Social Security Act.[11] Organizations such as the Child Welfare League have established desirable or recommended standards which should also be reviewed.[12]

Standards for day care have traditionally been low--too low--some experts have argued. According to Dr. Florence Ruderman: "By contrast . . . with nursery schools, elementary education or children's recreation services, day care has low status, poor support, low standards of staffing, and gives less attention to programming or developmental opportunities for children."[13]

Presumably low standards exist because day care service has traditionally been provided only to welfare or low-income children and has had neither the status nor the professional attention it should have.

But some people take the position that standards are too stringent. In particular, community groups that look in vain for a building capable of passing inspection feel that the standards are so high as to prevent the establishment of such facilities. It is argued that in middle-aged to deteriorating neighborhoods a less than adequate building will be preferable to neglecting the children. It is difficult to judge the reasonableness of any set of standards, although it is possible in some instances that the standards are unrealistic.

In most states the department of health and/or welfare will be responsible for issuing standards and approving licenses for day care centers. In some instances other agencies, such as the board of education, may be involved with standards for day care centers, so all possible avenues should be checked. Sometimes zoning ordinances regulate day care facilities and even stipulate amounts of indoor and outdoor space per child, hours of operation, parking, and buffering devices.

Physical Plant Standards. Many state laws regulating day care include standards for the physical facilities, covering such items as amount of indoor and outdoor space required per child, necessary equipment, amount of light and ventilation needed, and safety standards. Local building codes will also contain standards of construction. The Building Conference of America Basic Code, for instance, specifies that no day nursery may be constructed out of frame materials and that the more durable and safer the construction material, the larger the facility is permitted to be.[14]

A selected number of standards concerning the physical plant of a day care center are listed in Table 4.

Location Standards. The three main considerations in determining where a day care center should be located are: convenience to the users, availability and adequacy of open space, and safety measures.

Convenience has been stressed by day care planners. Convenience for the family often means location of the day care center close to home, in a familiar neighborhood. The Child Welfare League is quite adamant about this:

> Unless absolutely necessary transportation should be considered undesirable for young children. Children under 6 should not travel more than half an hour daily. Facilities for school-age children should be near enough to their school so that they can go back and forth alone.[15]

TABLE 4

DAY CARE PHYSICAL PLANT STANDARDS OF SELECTED AGENCIES AND JURISDICTIONS

Source (and Date)	Light/ Ventilation	Toilets	Interior Floor Space	Equipment	Safety	Sanitation	Outdoor Play Area
CHILD WELFARE (1969)	10% of floor area	1 toilet 1 basin per 10-15 children	50 sq. ft. of playroom per child	should be selected on basis of suitability	must comply to state building and fire laws		should adjoin building; 200 sq. ft. per child; well drained turf surface, shady space for digging; fenced
FEDERAL REQUIREMENTS (1968)	adequate	adequate	must meet state standards	must provide for range of indoor and outdoor activities; suitable	must meet safety and sanitation codes	floors and walls kept fully cleared	adequate outdoor space appropriate to their ages
ILLINOIS (1970)	50 ft. candles 70 recommended	5 per 100 children	50 sq. ft. per child average; 35 minimum	sufficient for quiet and active needs of children	play space outdoors safely enclosed or protected	premises cleaned daily	75 sq. ft. per child; enclosed or protected; well drained; surfaces appropriate for pull toys and climbing apparatus

On the other hand, convenience can also mean location of the day care facility near the mother's center of employment. This setting would mean a longer journey for the child, but the dividend for some children of going out of a ghetto into a pleasanter environment might compensate for a longer trip. Another approach is to locate the day care facility near a major transit stop or terminal.

A day care setting should be as open as possible because children require space both inside the center and outside. Open space can rarely be created on a lot already covered by a building. Nor will the average yard space on a normal lot suffice.

Safety is a prime consideration, especially if a day care center is to be located on a street with heavy traffic. There must be adequate protection for the children as they arrive and leave, and play areas should be set away from the street. If located at a place of employment, day care activities must be designed so that there is no interference from or with the central activity, industrial or commercial.

Because of the scarcity of land and money available for construction or renovation, it may not be possible to obtain an "ideal" location. It is wise, therefore, for planners to have an open and imaginative view about all possible locations.

The Child Welfare League suggests a variety of traditional locations:

> Space should be utilized for day care facilities, where feasible, in existing or new multipurpose structures, e.g., public housing projects, settlement houses, neighborhood service centers, community buildings, child health stations, schools, and churches.[16]

However, the increasing need for this community facility demands that nontraditional locations be considered. An unused neighborhood theater might be a possibility. A vacant storefront would be another. Strip commercial areas abound with vacant storefronts.

Schools are often mentioned as an ideal setting for day care because they are usually centrally located and would provide the critical play areas. But schools are often already crowded and burdened with financial problems. A means of utilizing the school setting would be to locate mobile units near the school, possibly at the edge of the playground.

A similar solution, which would offer both low-cost construction and appropriate open space, would be to locate mobile units at the edge of parks. In this case, however, communities would have to deal with the question of taking park land for another use. Mobile units could also be used on vacant parcels owned by the city.

Central business district organizations might consider sponsoring and locating a day care center downtown to provide convenient child care arrangements for the large secretarial and clerical daytime population. The top of a flat-roofed building might be adapted for open play space. Industries contemplating sponsorship of a day care program might investigate abandoned warehouses. Churches and community organization should examine their facilities with an eye toward utilizing an unused or underused physical plant. Other possibilities might be large old mansions, park pavilions, shopping centers--the list could go on indefinitely. In all cases, of course, adequate outdoor play space is required, and renovation or remodeling would have to be economically feasible.

Each community must look at its individual neighborhoods and day care needs to find possible locations.

Zoning for Day Care Centers

In order to get a clear picture of how communities are currently treating day care land use, approximately 30 recently enacted ordinances were reviewed. The regulations and standards lacked any real uniformity. This is due to differing ideas of what a day care center is and does; differing community life styles (urban versus suburban); and differing state standards. And because communities have different child care needs and legislation varies from region to region, it is not possible or desirable to cite or recommend any model zoning regulations.

Definitions. Day care centers are infrequently defined in ordinances, even in those provisions which regulate day care use. One means of handling definition in a zoning ordinance might be to define day care centers according to state or local legislation. The ordinance then can either adopt by reference the definition found in the appropriate legislation or use the identical language. In this way, the applicable state or local standards would have to be met for any day care use. An example of this kind of definition can be found in the Manhattan Beach, California, zoning ordinance:

> SECTION 226. DAY NURSERY. "Day Nursery" shall mean any type of group day care programs, including nurseries for children of working mothers, nursery schools for children under minimum age for education in public schools, parent cooperative nursery schools, playgroups for pre-school children, programs covering after-school care for school children, provided such establishment is licensed by the State and conducted in accordance with State requirements.

Locations. The only conclusion that can be drawn from a look at selected zoning ordinances is that regulations relating to day care facilities are diverse. In residential areas, especially low-density areas, day care centers tend to require a special permit or a conditional use permit. If they are allowed at all in commercial districts, day care centers are usually permitted by right. Rarely are child care institutions provided for in manufacturing districts.

A proposed ordinance for Puerto Rico permits a day care center when development standards relating to location are satisfied. In looking at an application, the Planning Board would consider the following guidelines:

1. Residential areas provide the most suitable environment for the very young children who are served by these facilities.
2. Quiet residential streets are appropriate locations if the proposed facility is small or will serve primarily its immediate neighborhood.
3. In commercial areas, peripheral locations are preferable. Locations in the center of an intensive commercial area interrupt its shopping pattern and impede its economic health and functioning.
4. Locations along major arterials are inappropriate, both for reasons of safety of the children and because frequent stopping of vehicles to deliver children can be a source of traffic obstruction.

It is important that the zoning ordinance accommodate day care centers. The Child Welfare League recognizes this when they say: "Consideration should be given in master city planning to locating day care facilities in areas where they are needed, and to the protective zoning laws which may influence their location."[17]

Because day care centers have characteristics similar to those of elementary schools, they could be allowed wherever elementary schools are permitted. The Child Welfare League, in fact, makes this suggestions: "Zoning law should provide for the same zoning regulations for day care centers as for schools and churches."[18]

This discussion of appropriate and possible locations for day care centers implies that day care facilities should be allowed in all districts, not necessarily by right but at least by special exception.

Standards. Standards are mentioned in zoning ordinances usually to specify the conditions that must be met to qualify for a conditional use permit. The standards most often relate to the required square footage of play area per child and off-street parking requirements. It would be wise to establish standards to ensure a healthy and safe environment for the children also, and to control the accompanying nuisance factors such as noise and traffic that a day care center generates. These standards should definitely comply with applicable local and state laws, and with standards already established by other comparable local agencies, especially in communities whose states have either not enacted day care legislation or where standards are exceptionally poor.

Feedback 3: Gather information

The group came up with the following list of characteristics that should characterize the general location of a day care center. It should be:

1. in an area where there is a demand for day care facilities.
2. have adequate open space.
3. safe, have enclosed open space and be off main roads.
4. in an area that is zoned for day care.

"It seems to me," said Donna, "that adequate open space and the safety factors are site characteristics and that we'll have to decide on a general location first, and then look for places that are for sale or rent within that area."

"That's right," said Don, "And the Urbana zoning laws are so liberal with respect to the location of day care centers, that virtually any place is acceptable as long as the other criteria are met."

"Fine," said Jan. "It seems that we've narrowed our problem down even further. What we have to do now is identify an area where there is a demand for day care services of the type we'd like to provide."

Instruction 4: Gather information/identify facts, assumptions, and constraints.

"Over the past six months we've gathered a bunch of information about the demand for day care. Let's review the information , and organize that information into facts, assumptions and constraints so that it is more readily useable in the process of estimating the demand for a day care center."

Read the survey data and ... the excerpt from "Working Women and Their Children," (pages 14-17) and make a list of the constraints relevant to locating the day care center.

Remember, a fact is any verifiable piece of information (for example, there are currently 32 day care centers operating in Urbana) an assumption is something that is not directly proveable, but which we assume is true for the purposes of our problem (for example, we may assume that there is an increasing trend toward working mothers, and an increasing demand for child care services.) A constraint is a limit on what solutions are acceptable (for example, we need to have a minimum of 30 students to make the program feasible).

Data from a survey of working mothers in the Urbana-Champaign metropolitan area.
(same size-500 randomly selected working mothers)

1. If you are currently using day care centers are you satisfied with the center?
   very satisfied - 60%
   satisfied - 30%
   unsatisfied - 10%

2. If you are not using day care centers, what is the major reason for not using them?
   - the quality of the day care centers is not good 10%
   - there are no centers convenient enough that I can use them 30%
   - there is not an opening at the day care center I would like 5%
   - my children are too young 25%
   - I don't believe in day care under any circumsntances 30%

3. If you were to use a day care center would you prefer it:
   a. near your home 40%
   b. near your work 30%
   c. no preference 30%

4. Even if a car was available, would you walk to put your child in day care if the center was
   a. 3 blocks away (1/4 mile) 60%
   b. 6 blocks away (1/2 mile 20%
   c. 12 blocks away (1 mile) 0%

5. If automobile transportation was <u>not</u> available, how far would you walk to put your child in day care?
   a. 3 blocks (1/4 mile) 95%
   b. 6 blocks (1/2 mile) 50%
   c. 12 blocks (1 mile) 20%

6. If automobile transportation is available, how far away from your home is "too far away" for a day care center.
   a. 1/2 mile 10%
   b. 1 mile 50%
   c. 2 miles 70%
   d. 5 miles 90%

From "Working Mothers and Their Children", U.S. Dept. of Labor, Employment Standards Administration, Women's Bureau, 1977

One of the most striking demographic changes that has taken place in the post-World War II era has been the increase in labor force participation of women with children under 18 years of age. Since the period immediately preceding World War II, the number of women workers has more than doubled but the number of working mothers has increased more than tenfold.

Nearly half (49 percent) of all mothers were in the labor force in March 1976 compared with 35 percent in 1965, 27 percent in 1955, and only 9 percent in 1940. Although the labor force participation rates of all women have increased markedly in the postwar era, the growth among mothers has been substantially larger, so that by 1976 their rate actually surpassed that for all women.

Working mothers make substantial contributions to the Nation's economy as well as to family income. In many instances these working women raise family income above the poverty level. Among those working mothers with husbands present, 20 percent had husbands whose incomes were below $7,000 in 1975. Also, income is of crucial importance to a significant number of women who are raising children in homes where the father is absent; 2.9 million working mothers were widowed, divorced, or separated in 1976.

Nearly half (46 percent) of all children under 18 years of age have mothers in the work force. While the number of children in the population has declined sharply since 1970, the number of children with working mothers has risen considerably--by 2.7 million.

MOTHERS IN THE LABOR FORCE

Of the nearly 38 million women in the labor force in March 1976, 14.6 million had children under 18 years of age. Some 9.2 million of these mothers had children 6 to 17 years of age only, representing over three-fifths of all working mothers. About 5.4 million had children under age 6,1/ accounting for nearly two-fifths of all working mothers. Of these mothers, 2.8 million had children 3 to 5 years and 2.5 million had children under 3 years of age.

Mothers with husbands absent (widowed, divorced, separated) were more likely to be in the labor force than were those with husbands present, regardless of the ages of their children. Even with very young children (under 6 years of age), mothers with husbands absent had a labor force participation rate of 56 percent; the rate for those with husbands present was 37 percent (table 1).

1/ May also have older children.

Note: "Mothers" refers to those with children under 18 years of age. Unless otherwise indicated, data are for March 1976 and apply to women 16 years of age and over.

Trends in Labor Force Participation

Between 1940 and 1976 the labor force participation rate of mothers increased more than fivefold, reflecting the most significant change in the labor force this country has ever experienced. In 1940 the 28-percent rate of all women was over three times the 9-percent rate of all mothers. However, by 1976 the situation had changed dramatically. The rate for mothers, at 49 percent, was 2 percentage points higher than that for all women (table 3).

Table 3.--Labor Force Participation Rates of Mothers and All Women,1/ Selected Years, 1940-1976

Year	Mothers 2/	All women 3/
1976	48.8	46.8
1975	47.4	46.3
1974	45.7	45.6
1972	42.9	43.9
1970	42.0	43.3
1968	39.4	41.6
1966	35.8	38.9
1964	34.5	37.4
1962	32.9	36.6
1960	30.4	36.7
1958	29.5	36.0
1956	27.5	35.9
1954	25.6	33.7
1952	23.8	33.8
1950	21.6	33.1
1948	20.2	31.9
1946	18.2	31.2
1940	8.6	28.2

1/ Includes women 16 years of age and over for 1968-1976 and 14 years and over prior to 1968.
2/ Data are for March except 1946-1954, which are for April.
3/ Annual averages.

Although the presence of very young children in the home tends to affect the labor force participation of mothers, an increasing proportion of these mothers are entering the work force. For example, from 1971 to 1976 the labor force participation rate of mothers with children under 3 years of age rose 7 percentage points--from 27 to 34 percent; for those with children 3 to 5 years the rate increased 9 percentage points--from 38 to 47 percent. However, the rate for mothers with children 6 to 17 rose only 4 percentage points over the 5-year period--from 52 to 56 percent. In 1960 the labor force participation rate of mothers with children under 3 was 17 percent; with children 3 to 5, 27 percent; and with children 6 to 17, 43 percent.

Minority Mothers 2/

Of the 5.0 million minority women workers, nearly 2.2 million were mothers of children under 18 years of age. About 1.2 million of these mothers had children 6 to 17 years only, and [illegible],000 had children under the age of 6.

CHILD CARE ARRANGEMENTS

Of particular concern today is the availability and quality of child care arrangements which are offered working mothers. With the increase in labor force participation of mothers, especially those with children under 6, there is a growing need for lower cost and more readily available day care facilities for children in the formative years. In 1975 there were over 16 million children 3 to 13 years old of working mothers, but only 279,000 (1.7 percent) were enrolled in group care centers (table 9).

Table 9.--Child Care Arrangements, by Number and Age of Children of Employed Mothers, 1975

(Numbers in thousands)

Arrangement	Children		
	3 to 13 years	3 to 6 years	7 to 13 years
Total children	16,046	4,658	11,388
Care in own home	13,354	3,027	10,327
Child's parents	9,797	2,514	7,283
Child cares for self	1,595	20	1,575
Other relative	1,504	346	1,158
Nonrelative	458	147	311
Care in someone else's home	2,097	1,342	755
Relative	932	570	362
Nonrelative	1,165	772	393
Group care center	279	193	86
Other	72	--	72
Not reported	247	98	149

Despite the rising trend in mothers' labor force participation, studies characteristically find that the presence of young children in the home tends to be an inhibiting factor in the mother's labor force activity. It would seem to follow that expanding day care facilities would not only permit more women with young children to enter the job market in search of work, if they so wish, but would also alleviate many of the difficulties that mothers who presently work have in arranging for the care of their children.

Source: Data in this report are from the U.S. Department of Commerce, Bureau of the Census, and U.S. Department of Labor, Bureau of Labor Statistics.

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Feedback 4: Facts, assumptions and constraints.
The group compiled the following list:

Facts:
-Mothers working has increased 10 fold since WW II
-49% of mothers are in labor force
-47% of women are in labor force
-47.2% of mothers with children 3-5 are in labor force
-33.8% of mothers w/children under 3 are in the labor force.

Assumptions

-The trends of mothers to work will continue at the current rate or increase.
-Based on survey data, there is a demand for day care centers.
-A new facility, will probably not be able to compete with other facilities on a quality basis.
-A main consideration will be convenience to parents.
-From the perspective of the parent, there is only a slight preference for home, versus work, oriented day care.
-Many people who are currently not in the labor force (students, unemployed parents) may be in need of day care.

Constraints

-Distance from the child care center is a major factor. Most of the children in a home oriented day care center will probably come from within 1/2 mile of the center.

-With a quality day care center, conveniently located, the maximum participation rate would not exceed 45% of the working women with children.

-This also means, that unless there is excess demand, that an existing center can't handle, the new center should not be closer than a mile from existing center.

"Well," said Jerry "What we need to do now is look at data for Urbana, and estimate areas where the demand is great enough to support a new day care center."

"Right," said Donna. "And we should probably calculate the demand for both home and work oriented centers."

Instruction 5: Gather information/Organize data.

Examine the data package on Urbana (pages 19-34). Using the facts, assumptions and constraints you've already developed, and any others that you think of while looking at the new data identify specific criteria for identifying areas likely to be able to support a day care center. Map each of the criteria you've identified.

Day Care Center Location Exercise

Champaign-Urbana Community Description

Champaign-Urbana is about 130 miles south of Chicago in the heart of the Midwestern corn and soybean farming country. But it is mainly a University town. The population of the twin towns is 168,500. Almost 34,000 residents are university students, 4,500 are faculty or professional staff at the University and 4500 work there in other jobs. The University is centrally located in the community, part of the campus being in Champaign and part in Urbana. Although many of the students are single and live in apartments and dormitories on and around campus, there are also quite a few married students, and some of these people have children. Thus there are some students who would need access to day care for children.

In addition to the University there is a junior college, Parkland, located on the north-west edge of town. It has over 7,000 students, many of whom are part time, including parents with children who would need day care.

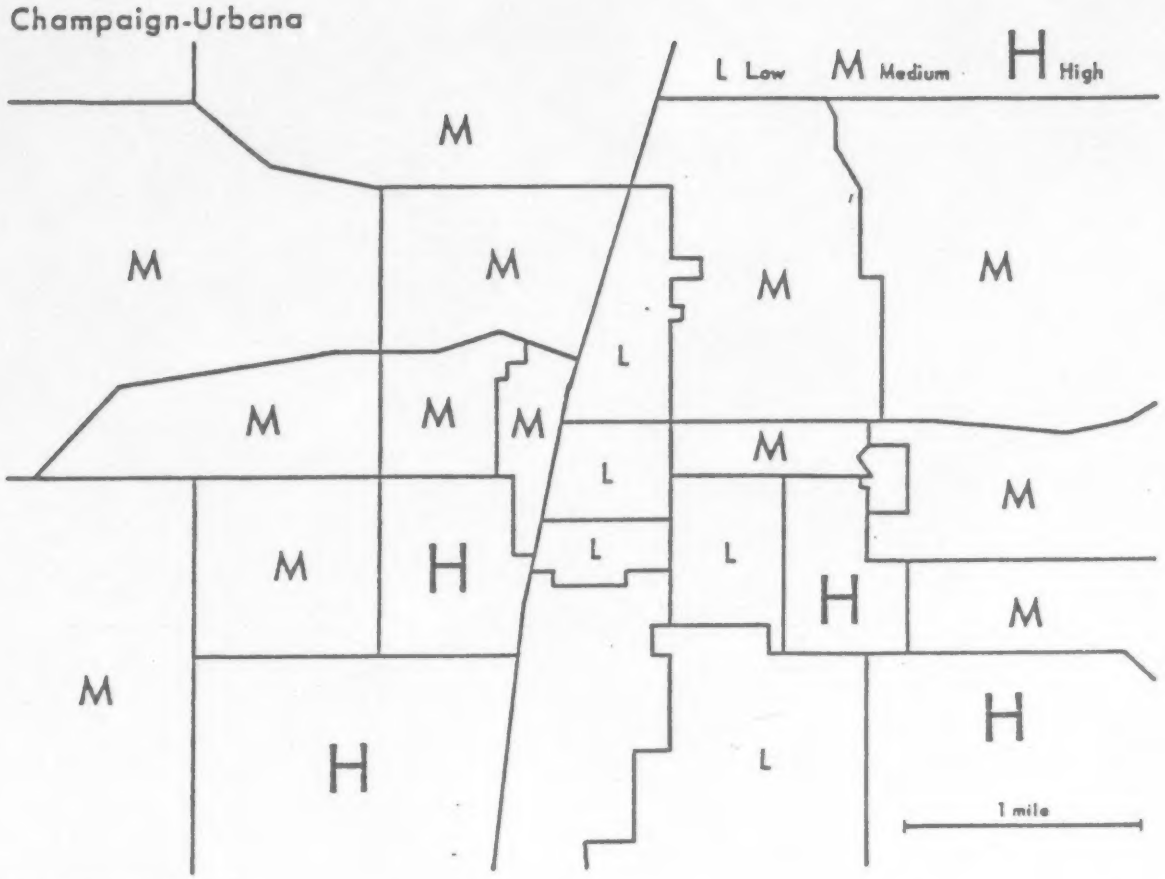
Employment statistics show that government agencies account for about 40 per cent of the jobs in town. Obviously many of these are University employees. Some of the others would be in other state agencies which are near the campus. Others would be in offices in downtown Urbana or downtown Champaign, but some would be dispersed around the community, for example in public schools.

The next largest category of employees are in trade - about 15,000 people. There are several major business areas which would be the work sites for these people. In addition to downtown Champaign and downtown Urbana (both of which are declining business areas), there is a campus town, a large shopping mall on the north-edge of town (Market Place) and a smaller shopping center - Country Fair on the western edge of town. There are also strings of commercial businesses on the main thoroughfares - especially University and Prospect Avenues, Route 45 and the Philo Road.

Service industries provide jobs for almost 10,000 people. Most of these jobs would be scattered. Those in banks and insurance agencies, for example, are mainly in the shopping districts. One large hospital and clinic, Carle Hospital, on University Avenue, is a major employment site.

Manufacturing jobs account for about 6,500 people. Many of these would be jobs for men. The biggest industrial plants are in the north and northwest portions of town and are identified by name on your map of day care centers.

The three maps of census data you have give you an idea of the economic levels of people in different parts of town and the distribution of people who might want day care service. The low income areas in the southern half of the community would mostly include students. The low income area in the northern half is principally a black residential area.



By Census Tracts
MEDIAN INCOME

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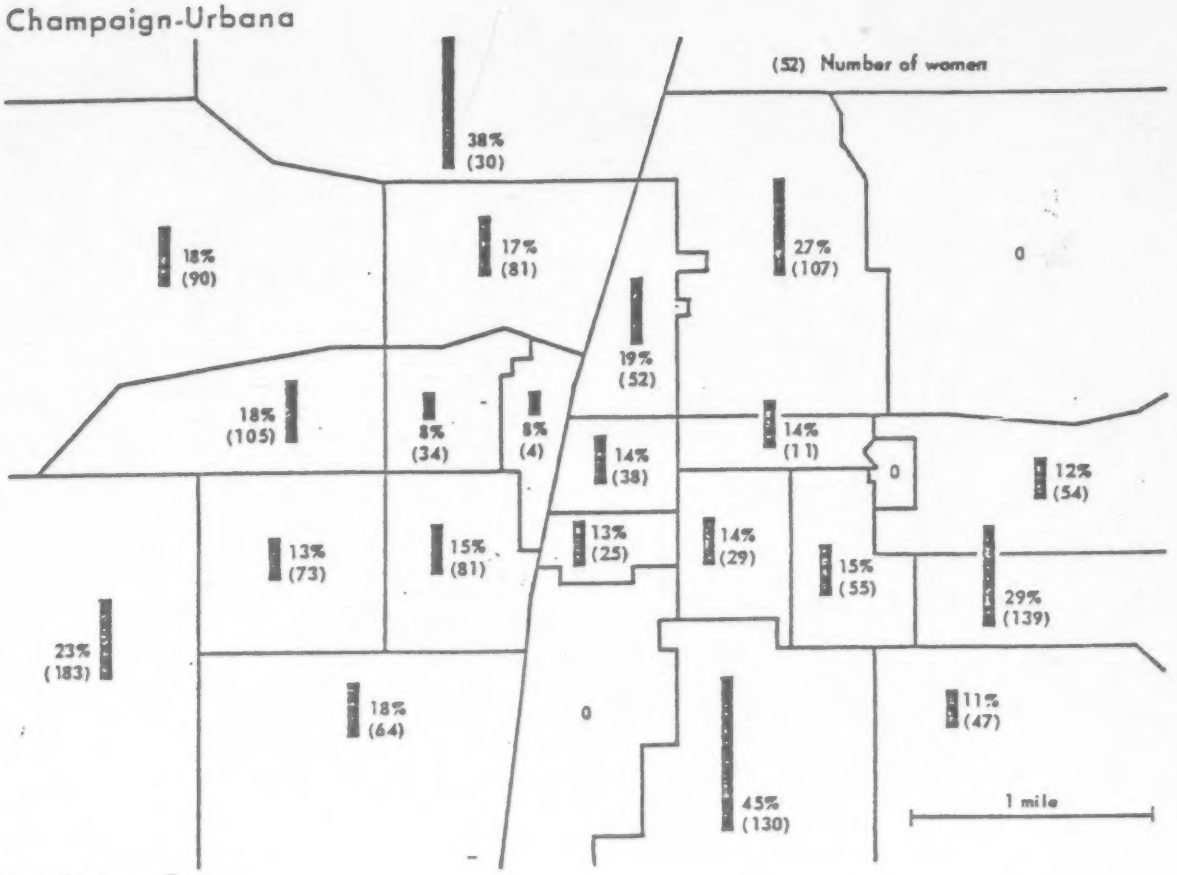
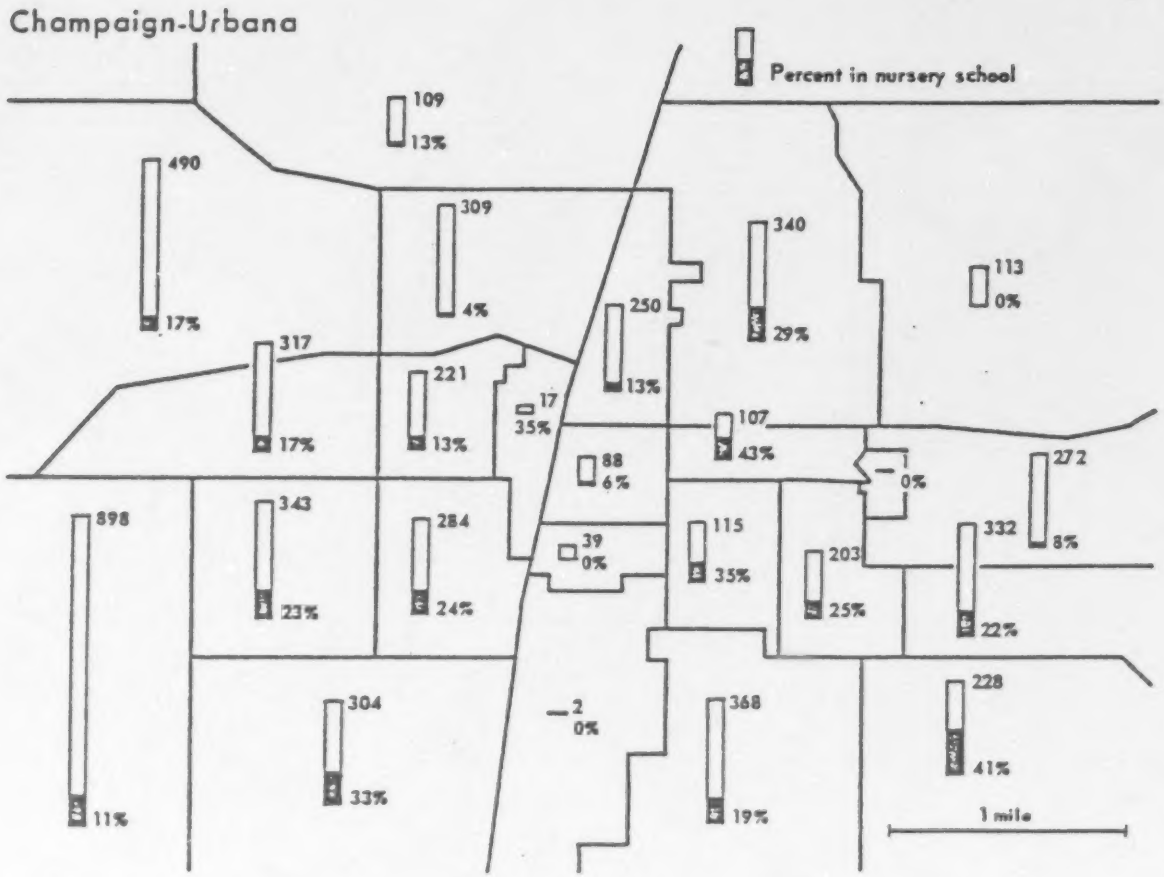


By Census Tracts

PERCENTAGE OF MARRIED WOMEN IN LABOR FORCE

WITH CHILDREN LESS THAN 6 YEARS OF AGE



By Census Tracts

CHILDREN LESS THAN 5 YEARS OF AGE AND
PERCENT ENROLLED IN NURSERY SCHOOL

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Zucchini adds zip
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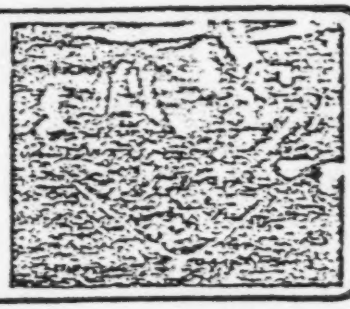

Day care centers meet working mothers' needs

By Nina Rubel
Morning Courier Staff

A total of 55 full-day child care centers and nursery schools offer their services to children in Champaign-Urbana, Rantoul and nearby small towns.

As our two charts indicate, parents can choose from a wide range of programs for children age two and older although the number of facilities offered for infants remains small.

Three trends emerge from interviews with the directors of day care centers and nursery schools listed in the charts.

—The demand for full-time day care is on the increase while the interest in nursery school programs is decreasing.

—Prices are higher for the majority of facilities although the increases are small when compared to the overall rate of inflation since last fall.

—Day care for infants is at a premium. All four centers offering infant day care are fully booked and several report long waiting lists.

"Where nursery schools are suffering, day care centers are coming on strong, said Barbara Swikle, director of the First United Methodist Day Care Center and Weekday Nursery School in Champaign.

"We used to have 160 children enrolled in our nursery school. Now we are having difficulty filling 120 spaces and have had to drop one class for lack of enrollment," she said.

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Like many of the other child care professionals interviewed, she attributed the increased demand for full-time day care and decreased interest in nursery schooling to the fact that so many mothers of pre-school children are now working full-time.

Eighteen of the day care centers listed have increased their fees over those of last year while five have maintained their 1977 prices. No price comparison is available for eight centers.

Of the nursery schools listed, 12 have upped their fees while three retain last year's price structure. For eight others no price comparison is available.

A typical price increase for day care centers is $5 — in many cases from $30 to $35 for full-time weekly care — although for some centers the increase is only one or two dollars a week.

For nursery schools the increase ranges from $1.50 to $4 a month for three-day programs. The monthly fee for five-day programs is up by $5 or $6 for several schools. The average nursery school program is offered for 2½ or three hours a day.

Prices are still generally remarkably low considering the cost of rent, equipment and supplies, Marjorie Hall said.

Mrs. Hall is day care center licensing representative in the Champaign-Urbana area for the Illinois Department of Children und Family Services (DCFS).

DCFS administers the licensing of all local child care centers and nursery schools and Mrs. Hall visits all the centers and schools every year.

"Most of the people operating the centers and schools are so dedicated, they keep their rates very low to enable as many children to attend as possible. Often they end up working for minimum wages and, in effect, subsidizing the parents," she said.

Intense demand for day care for infants — generally defined by the day care centers as children ages six weeks to 18 months — is reported by all four centers offering infant care.

The centers are First United Methodist Day Care Center, ICBD Infant-Toddler Center operated by the Institute for Child Behavior and Development at the University of Illinois, Our Gang Day Care Center, and Toddlers' Campus.

The six spaces for infants at Toddlers' campus are filled and Carole Davis, the director, reports a waiting list of at least 80 children. Another waiting list for the center's eight spaces for children ages 1½ to 2½ totals 40.

First United Methodist also has a waiting list of more than 80 names for its spaces for infants and toddlers, Mrs. Swikle said.

The infant care at Toddlers' Campus is performed by two women, making a ratio of one adult to three children. Half of the nursery room is given over to a group of small cribs and a changing table, and the other half contains walkers, jumping chairs and toys and play equipment.

In addition to feeding and changing the babies, the two staffers carry out daily schedules designed for each individual child to further its motor and muscle development and stimulate its intellectual and emotional development.

When parents pick up their infant at the end of the day they are often amazed at the many new things the child has learned, Ms. Davis said.

"It stretches the parent to see what you can do with a small child. We challenge the kids and through them the parents," she said.

During the past year several day care centers and nursery schools have closed and others have opened.

Four day care centers, all in Champaign, have closed. They are Kiddie Haven, the victim of a fire a few years ago; Nursery Infant and Toddler Day Care; Small World; and Wee Care Day Care.

Two new day care centers are A Step Ahead in St. Joseph, and Brighten Your Corner, Champaign.

Two long-established nursery schools, Avondale Nursery School, Champaign, which began 13 years ago, and Jack and Jill Play School, Inc., Urbana, have closed.

One new nursery school, Children's Christian Campus, Champaign, has opened.

Partial-day centers: P. 27

Jimmy Stepusin climbs happily at his day care center

(Morning Courier photos by Curt Beamer)

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Full-Day Child Care Centers

Map Reference No.	Name, location, contact person, telephone	Hours, days	Ages	Full-time weekly rates	Teacher-student ratio	Capacity	Vacancies
2	Bradley Street Day Care Center 2102 E. Washington, Urbana Shirley Rawls 384-4434	7:30 a.m.-5:30 p.m. M-F	2-10	$30 and up	1:5	40	yes
3	Brighten Your Corner Day Care 2604 Curtis, Champaign Marjorie Herndon 359-8288	6:30 a.m.-5:30 p.m. M-F	2-5	$30 for 1 (sibling $25)	1:8	34	yes
4	C-U Day Care Center 102 N. State, Champaign Barbara Hall 359-6798	7:30 a.m.-5:30 p.m. M-F	2-5	sliding scale-state funded	1:5	70	yes (age 2 & 3)
5	Columbia School Center 1100 N. Neil, Champaign	7:30 a.m.-4 p.m. M-F	3-5	sliding scale	1:10	16	
6	First United Presbyterian Church Center 602 W. Green, Urbana	7:30 a.m.-5:30 p.m. M-F	same as above	same as above	same as above	25	
7	Grace Lutheran Church Center 901 W. Union, Champaign	same as above	same	same	same	20	
8	Rantoul Center Myra Thompson School 200 S. Frederick, Rantoul	7:30 a.m.-5 p.m. M-F	same	same	same	35	yes
9	University Place Christian Church Center 403 S. Wright, Champaign	7:30 a.m.-5:30 p.m. M-F	same	same	same	24	
11	Children's Center Day Care 304 S. Race, Urbana Jane Amundsen 367-0842	7:30 a.m.-5:30 p.m. M-F	1½-4	$35-$42 sliding scale	1:4 to 1:9-varies by age	38	no
12	Children's House 2501 W. Bradley, Champaign Jeannece Linton 359-8699	7:30 a.m.-5:30 p.m. M-F	2-6	$35	1:9	28	yes
13	Church of the Living God Day Care Center 1109 N. Fourth, Champaign Laura Bynum 359-4110	6:30 a.m.-5 p.m. M-F	2-6	$30	1:5	35	yes
14	Community Day Care School 1 E. Bradley, Champaign Nancy Parker 356-7184	7:30 a.m.-5:30 p.m. M-F	3-5	sliding scale	1:8	40	yes
15	Do-Be Day Care 1210 Paula, Champaign Donald E. Restad 356-8016	7:30 a.m.-5:30 p.m. M-F	2-6	$25	1:9	28	yes
16	Early Learning 809 W. Kirby, Champaign Jill Hardwick 359-0300	7:30 a.m.-5:30 p.m. M-F	2-6	$184 per month for age 2-$170 for ages 3-5	1:5 to 1:10-varies by age	80	yes
17	First United Methodist Day Care Center 210 W. Church, Champaign Barbara Swikle 356-1247	7:30 a.m.-5:30 p.m. M-F	0-5	$32 to $40 varies by age	1:4 to 1:8-varies by age	74	no
18	Hanlin Day Care 720 Sherwood Terrace, Champaign Mrs. Burl Hanlin 352-1077	7 a.m.-5:30 p.m. M-F	2-18	$25 ($35 for two siblings)	1:8	15	no
19	Happi-Time Day Care 1019 Stratford, Champaign Doris W. Lewis 352-8387	7:30 a.m.-5:30 p.m. M-F	2-10	$32.50	1:7	27	yes
20	Helen E. Johnson-Salem Preschool 500 E. Park, Champaign Betty J. Hassell 359-3225	7:30 a.m.-5:30 p.m. M-F (also half-days)	2½-5	$30	1:6	28	yes

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Full Day Child Care Centers, cont.

Map Reference No.							
21	ICBD Children's Learning Center 51 Gerty, Champaign Sarah Trovillion 333-3996	7:30 a.m.-5:30 p.m. M-F	3-6	sliding scale	1:5 to 1:10	40	no
22	ICBD Infant-Toddler Center 1841 Orchard Place, Urbana Kathy Aplington 333-7509	7:30 a.m.-5:30 p.m. M-F	6 weeks-3 years	$120 to $180 sliding scale	1:4 for infants 1:6 for toddlers	20	no
23	Jonathan's Child Care Center 203 N. James, Champaign Kathryn Horner 351-3014	6:30 a.m.-6 p.m. M-F	2-10	$27.50 ($32.50 for age 2)	1:8 to 1:10	46	yes
25	Kiddie Kountry Day Care Center 2502 S. Race, Urbana Karen Jensen 384-8428	7:30 a.m.-5:30 p.m. M-F	2-6	$35	1:6 to 1:8	52	yes
26	Kids Korner 1557 Hunter, Urbana Phyllis Cottle 344-2372	7 a.m.-5:30 p.m. M-F	2-6	$25	1:10	20	yes
27	Kinder Care Learning Center 1101 E. Colorado, Urbana Mara Siegel 328-3202	7:30 a.m.-5:30 p.m. M-F	2-12	varies with program	1:8 to 1:10 (1:20 for over 5)	94	yes
28	La Petite Academy of Champaign 415 Avondale, Champaign Velda Freehill 352-5841	6:30 a.m.-5:30 p.m. M-F	2-12	$29.50	1:8 to 1:10	80	yes
29	(The) Learning Tree Day Care Center 1304 S. Vine, Urbana Marian Kirby 367-5503	7:30 a.m.-5:30 p.m. M-F (also part-time)	2½-6	$31	1:10	39	yes
31	Montessori School of C-U 1112 Broadmoor, Champaign Rita Young 356-1818	7:30 a.m.-5:30 p.m. M-F (also after-school care)	2½-6	$155 per month	1:8	24	
32	Our Gang Day Care Center 502 E. University, Champaign Jalaine Chisholm 333-2845 (for parents under 21 in school)	7:30 a.m.-4 p.m. M-F	6 weeks-3 years	sliding scale	1:2½	15	no
33	Peter Pan Day Care Center 1201 W. Park, Urbana Rosetta Gray 367-2812	7:30 a.m.-5:30 p.m. M-F	2-6	$29	1:9	25	yes
34	Toddlers' Campus 810 W. Michigan, Urbana Carole Davis 344-0675	7:30 a.m.-5:30 p.m. M-F	6 weeks-5 years	$37 to $46-varies by age	1:3 to 1:10	42	yes
35	U of I Child Development Laboratory 1105 W. Nevada, Urbana Laurent Gosselin 333-0377	9 a.m.-4 p.m. Tu-F	3-4	inquire at school	1:3 to 1:5	20	no
36	Winfield Village Preschool (A Gerbers Children Center) 425 Paddock W., Savoy Nancy Gaumer 359-5223	6:30 a.m.-6 p.m. M-F	2½-6	$31.25	1:8 to 1:10	80	yes

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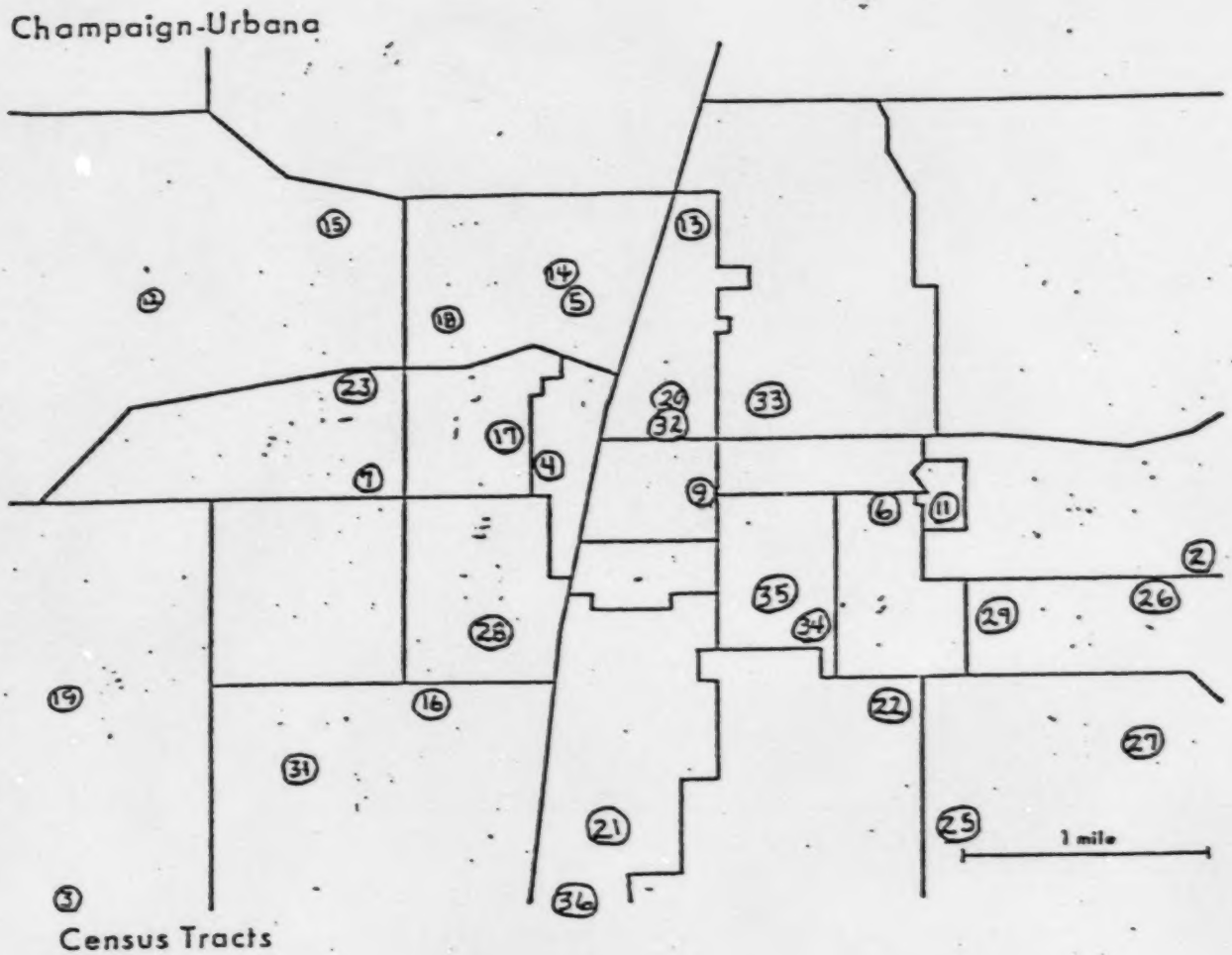
Existing Day Care Centers



Market Place
Shopping
Center
K Mart
Bloomington
Rd.
Parkland
Junior
College
Bradley
Ave.
Kraft-Hummel-
Nelson Concrete
Industrial Area
Avenue
Ave.
Washington St.
St.
Church
Avenue
University
Ave.
McKinley
Springfield
Avenue
State
Neil
St.
John
St.
Green
Country Fair
Shopping
Center
Mellis
Prospect
Kirby
Avenue
subdivisions
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Devonshire
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Subdivision
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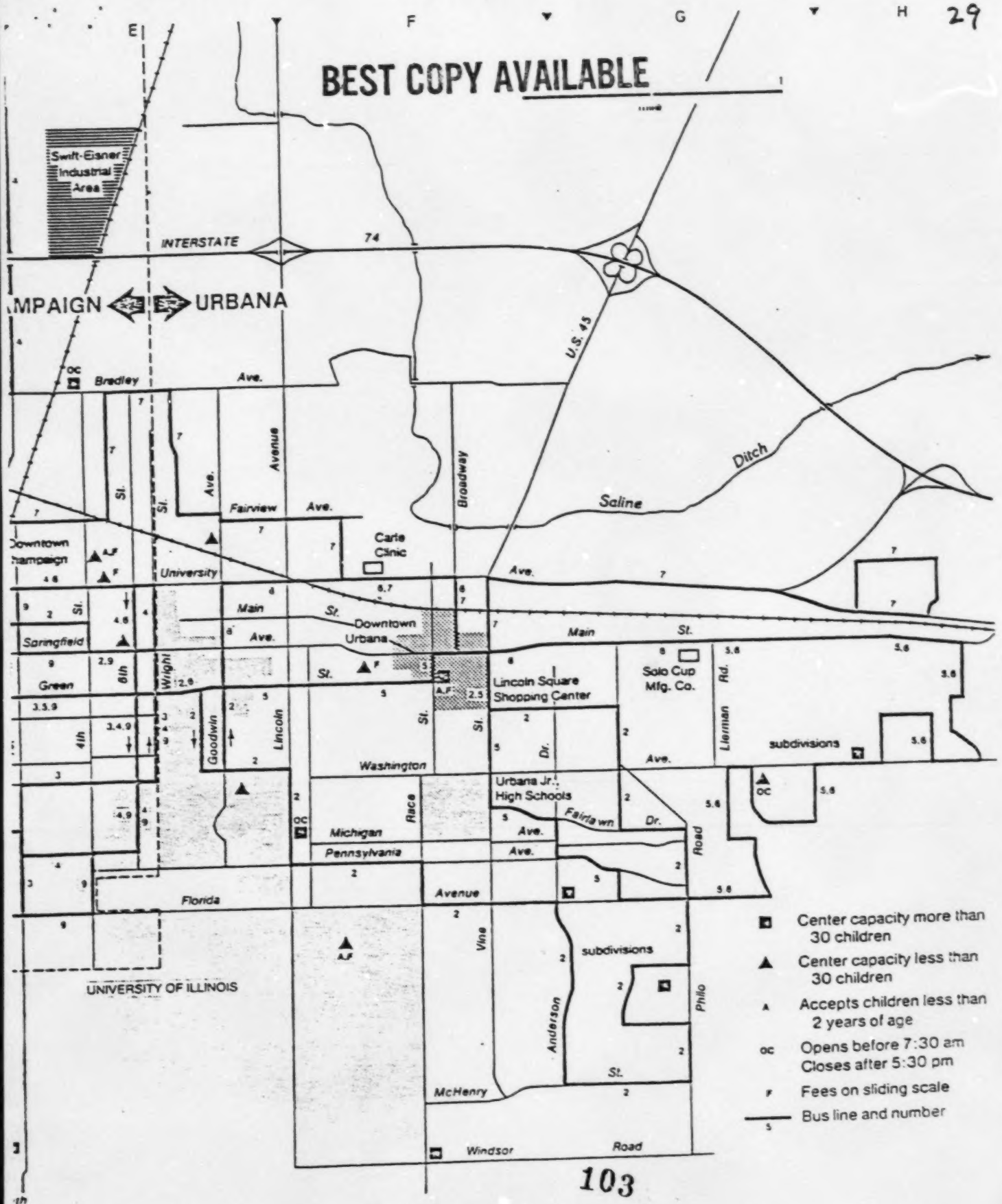

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Table P-1. General Characteristics of the Population: 1970

[See explanation later for derived figures (percent, median, etc.) and meaning of symbols, use text]

Census Tracts	Champaign County					Champaign								
	Total	Champaign	Rantoul	Urbana	Balance	Tract 0001	Tract 0002	Tract 0003	Tract 0004	Tract 0005	Tract 0006	Tract 0007	Tract 0008	Tract 0009
RACE														
All persons	163 281	38 532	23 562	32 606	48 287	678	2 748	4 818	4 818	4 448	4 133	3 794	838	4 348
White	150 328	30 615	23 060	29 715	47 488	614	148	3 581	4 520	4 182	3 847	3 172	808	3 974
Negro	10 677	5 782	2 025	2 655	715	54	2 584	208	157	232	257	597	8	348
Percent Negro	6.5	9.3	7.9	8.1	1.5	8.1	94.3	7.2	3.3	5.2	6.2	15.7	1.3	8.4
AGE BY SEX														
Male, all ages	83 991	19 834	11 234	15 744	36 219	294	1 288	2 262	4 435	2 133	1 884	1 875	383	2 122
Under 5 years	6 678	1 854	1 252	1 842	2 498	4	122	13	24	144	125	172	47	248
5 and 6 years	2 545	720	485	542	798	2	50	4	5	58	48	82	24	93
7 to 9 years	7 126	2 091	1 436	1 960	2 639	7	147	24	12	161	141	162	49	226
10 to 13 years	1 318	369	284	201	462	1	31	2	2	31	23	37	10	47
14 years	1 447	434	297	188	529	1	31	3	2	31	23	37	10	47
15 to 17 years	7 005	2 139	1 796	942	2 428	7	147	24	12	161	141	162	49	242
18 and 19 years	1 252	417	230	190	515	1	31	2	1	31	23	37	10	47
20 years	12 908	5 406	3 157	2 299	2 044	12	147	24	65	161	141	162	49	242
21 years	1 275	407	268	198	402	1	31	2	2	31	23	37	10	47
22 to 24 years	1 263	389	179	216	479	1	31	2	1	31	23	37	10	47
25 to 29 years	1 188	410	142	243	393	1	31	2	1	31	23	37	10	47
30 to 34 years	3 970	1 997	1 756	1 028	1 189	7	147	24	65	161	141	162	49	242
35 to 39 years	5 217	2 203	1 504	1 111	1 399	1	31	2	2	31	23	37	10	47
40 to 44 years	14 334	6 660	4 784	1 834	2 056	12	147	24	65	161	141	162	49	242
45 to 49 years	4 883	2 082	1 749	1 034	2 839	1	31	2	2	31	23	37	10	47
50 to 54 years	4 037	1 779	1 495	1 242	2 888	1	31	2	1	31	23	37	10	47
55 to 59 years	12 411	3 973	2 652	2 882	2 357	7	147	24	65	161	141	162	49	242
60 to 64 years	8 010	2 453	1 678	2 970	910	1	31	2	2	31	23	37	10	47
65 to 74 years	6 348	2 257	1 397	2 191	743	1	31	2	1	31	23	37	10	47
75 years and over	3 434	1 118	652	1 467	865	1	31	2	1	31	23	37	10	47
Female, all ages	79 290	18 698	12 328	16 862	31 312	384	1 460	2 556	2 383	2 315	2 249	1 919	455	2 122
Under 5 years	6 280	1 777	1 159	1 637	2 307	4	122	13	24	144	125	172	47	248
5 and 6 years	2 287	709	459	576	852	2	50	4	5	58	48	82	24	93
7 to 9 years	6 908	2 089	1 397	1 960	2 639	7	147	24	12	161	141	162	49	226
10 to 13 years	1 324	394	268	179	473	1	31	2	2	31	23	37	10	47
14 years	1 337	384	276	180	497	1	31	3	2	31	23	37	10	47
15 to 17 years	6 776	2 068	1 232	1 129	2 347	7	147	24	12	161	141	162	49	242
18 and 19 years	1 241	381	207	180	473	1	31	2	1	31	23	37	10	47
20 years	9 429	3 232	1 382	1 847	2 047	12	147	24	65	161	141	162	49	242
21 years	1 155	367	185	223	446	1	31	2	2	31	23	37	10	47
22 to 24 years	1 334	414	185	221	514	1	31	2	1	31	23	37	10	47
25 to 29 years	1 194	391	185	224	374	1	31	2	1	31	23	37	10	47
30 to 34 years	2 792	912	778	1	1	7	147	24	65	161	141	162	49	242
35 to 39 years	3 042	1 173	777	1	1	1	31	2	2	31	23	37	10	47
40 to 44 years	12 334	4 711	3 777	1	1	12	147	24	65	161	141	162	49	242
45 to 49 years	3 198	1 310	1	1	1	1	31	2	2	31	23	37	10	47
50 to 54 years	2 728	1 223	1	1	1	1	31	2	1	31	23	37	10	47
55 to 59 years	11 209	3 440	1 916	1	1	7	147	24	65	161	141	162	49	242
60 to 64 years	7 634	2 507	1	1	1	1	31	2	2	31	23	37	10	47
65 to 74 years	6 611	2 469	1	1	1	1	31	2	1	31	23	37	10	47
75 years and over	3 256	1	1	1	1	1	31	2	1	31	23	37	10	47
	2 429	1	1	1	1	1	31	2	1	31	23	37	10	47
	3 316	1	1	1	1	1	31	2	1	31	23	37	10	47
	2 726	1	1	1	1	1	31	2	1	31	23	37	10	47
TYPE OF FAMILY AND NUMBER OF OWN CHILDREN														
All families	36 669	11 634	5 485	6 133	13 932	114	434	457	338	1	1	1	1	1
With own children under 18 years	20 775	6 208	3 436	3 222	7 708	58	232	111	88	1	1	1	1	1
Number of children	45 805	13 604	8 432	4 592	17 177	114	872	194	88	1	1	1	1	1
Husband-wife families	33 343	10 338	4 994	5 798	12 213	114	504	457	338	1	1	1	1	1
With own children under 18 years	18 899	5 317	3 328	2 808	7 774	58	232	111	88	1	1	1	1	1
Number of children	41 587	12 050	7 624	5 133	16 267	114	872	194	88	1	1	1	1	1
Percent of total under 18 years	84.5	87.0	88.0	80.0	92.9	46.3	72.7	41.2	24.3	25.7	25.0	84.2	87.4	87.4
Families with other male head	369	285	128	128	128	1	1	1	1	1	1	1	1	1
With own children under 18 years	191	58	32	32	32	1	1	1	1	1	1	1	1	1
Number of children	335	109	64	64	64	1	1	1	1	1	1	1	1	1
Families with female head	3 777	1 999	1	1	1	1	1	1	1	1	1	1	1	1
With own children under 18 years	1 685	633	1	1	1	1	1	1	1	1	1	1	1	1
Number of children	2 863	1 443	1	1	1	1	1	1	1	1	1	1	1	1
Percent of total under 18 years	8.8	10.1	8.6	12.0	4.3	20.4	14.7	34.9	14.7	12.5	14.6	22.2	13.7	13.7
Persons under 18 years	48 069	14 354	8 762	7 034	17 919	54	1 834	216	121	1 079	749	1 136	283	1 737
SCHOOL ENROLLMENT														
Enrolled persons, 3 to 34 years old	44 917	11 226	7 385	14 284	11 694	173	831	2 406	3 319	1 433	1 226	984	226	1 487
Nursery school	1 241	440	123	424	234	6	16	5	1	36	21	11	14	50
Public	294	128	28	78	78	1	16	1	1	11	8	1	1	101
Private	2 316	678	378	365	897	1	12	5	1	72	11	11	12	101
Kindergarten	2 482	664	368	235	897	1	12	5	1	72	11	11	12	101
Public	22 637	6 767	4 618	2 816	8 436	28	332	80	48	448	328	488	124	783
Private	21 415	6 247	4 334	2 779	8 055	28	332	80	48	448	328	488	124	783
Elementary	9 701	2 999	1 496	1 317	3 729	10	197	28	11	283	201	200	78	312
Public	9 441	2 851	1 421	1 482	3 707	10	197	28	11	283	189	195	78	312
High school	28 802	14 474	686	11 262	2 380	129	86	2 302	3 247	643	674	224	43	342
College														
Percent enrolled in school by age														
16 and 17 years	94.8	92.5	93.7	97.9	93.6	-	85.5	-	-	78.5	97.5	95.1	-	91.2
18 and 19 years	68.0	83.4	46.2	89.3	47.4	50.7	73.8	21.9	87.7	84.8	73.4	51.5	74.8	74.8
20 and 21 years	59.1	71.8	23	79.9	33.1	26.3	84.0	80.5	44.7	51.8	20.0	25.9	23	34.2
22 to 24 years	42.2	34.4	9.1	62.4	23.7	38.2	10.2	69.0	81.2	43.7	24.4	7.3	20.7	14.4
25 to 34 years	22.2	28.2	5.7	44.2	11.0	8.1	4.2	20.0	20.8	21.5	27.2	12.7	8.9	6.9
Persons 16 to 21 years not high school graduates and not enrolled in school	5.6	4.2	7.4	4.2	9.9	8.8	17.3	1.1	5.2	3.7	7.1	14.6	8.9	6.9

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Census Tracts	Champaign—Con.					Urbana					Urbana—Con.				
	Tract 0010	Tract 0011	Tract 0012	Tract 0013	Tract 0014	Tract 0051	Tract 0052	Tract 0053	Tract 0054	Tract 0055	Tract 0056	Tract 0057	Tract 0058	Tract 0059	Tract 0060
RACE															
All persons	4 633	3 192	7 688	3 696	3 442	166	3 377	3 578	1 375	3 884	3 383	3 488	4 346	6 382	3 989
White	4 521	3 134	7 493	3 592	3 119	153	2 146	1 842	1 234	3 723	3 243	3 347	4 221	5 704	3 572
Negro	93	39	225	58	246	10	161	1 693	139	34	37	22	50	255	254
Percent Negro	2.0	0.4	4.2	1.5	7.1	6.0	6.8	47.3	10.1	0.9	1.1	0.6	1.2	4.0	6.4
AGE BY SEX															
Male, all ages	2 257	2 345	3 915	2 077	2 327	72	1 384	1 714	671	1 769	1 593	1 733	2 163	2 676	2 644
Under 5 years	174	170	445	153	-	1	54	183	64	127	162	164	110	59	174
3 and 4 years	82	86	198	63	-	-	14	63	30	45	53	47	37	18	58
5 to 9 years	207	233	567	204	-	-	38	145	72	125	156	194	129	26	82
5 years	41	39	108	45	-	-	5	22	13	24	37	34	33	7	24
6 years	39	46	118	45	-	-	7	28	12	23	32	40	18	6	14
10 to 14 years	215	245	551	197	-	-	33	159	72	133	145	217	122	15	17
14 years	37	37	80	45	-	-	6	35	10	26	31	45	37	1	2
15 to 19 years	215	251	317	149	1 751	9	84	146	83	143	133	155	214	422	698
15 years	47	42	90	33	-	-	7	33	19	31	31	42	34	5	2
16 years	44	54	73	33	-	-	11	37	16	27	27	39	34	4	2
17 years	34	45	65	29	25	2	15	25	19	23	27	33	40	17	15
18 years	34	53	53	31	938	2	30	27	20	33	30	28	41	248	294
19 years	56	57	56	23	788	4	41	24	9	30	18	13	63	348	385
20 to 24 years	197	172	268	286	745	24	590	259	49	292	158	134	97	1 380	680
20 years	35	39	61	48	605	9	99	46	4	30	21	14	124	449	309
21 years	34	39	62	100	210	1	197	65	19	57	34	23	130	349	179
22 to 24 years	244	201	258	311	28	13	290	262	96	254	305	195	343	427	348
25 to 44 years	229	309	393	265	1	5	99	144	68	177	182	274	180	76	63
45 to 54 years	268	280	267	111	-	2	54	155	70	155	172	261	178	24	4
55 to 59 years	110	147	62	55	-	5	21	53	24	75	58	77	97	18	1
60 to 64 years	114	107	79	53	-	4	25	50	22	84	57	69	74	10	1
65 to 74 years	128	137	77	34	1	1	26	81	29	109	34	48	119	23	-
75 years and over	82	55	37	9	1	2	18	73	12	95	15	8	78	16	-
Female, all ages	2 376	2 448	3 888	1 867	915	94	1 677	1 664	704	2 635	1 790	1 747	2 184	3 706	1 921
Under 5 years	141	173	433	151	2	-	53	158	69	145	170	119	93	56	194
3 and 4 years	65	72	170	71	-	-	24	60	20	57	69	41	36	11	56
5 to 9 years	143	208	560	210	-	-	33	130	78	131	158	143	171	29	67
5 years	36	37	108	42	-	-	5	17	14	24	36	27	19	7	14
6 years	29	46	133	35	-	-	9	22	15	27	27	35	19	5	20
10 to 14 years	214	253	698	196	2	2	34	158	78	118	150	217	128	26	33
14 years	37	42	94	31	1	1	7	27	18	25	21	41	26	7	7
15 to 19 years	208	233	319	150	613	2	78	148	63	139	142	148	154	1 558	785
15 years	50	48	77	28	-	2	15	28	10	19	28	33	23	-	7
16 years	37	54	58	44	-	2	4	40	22	32	37	38	23	1	6
17 years	36	46	66	33	13	-	3	33	14	28	30	33	23	39	28
18 years	36	46	41	22	327	1	22	15	9	24	27	33	23	761	417
19 years	49	39	77	21	273	-	34	42	8	36	21	31	31	756	332
20 to 24 years	214	154	286	201	261	15	409	238	78	281	189	129	290	1 568	488
20 years	47	42	62	31	127	2	74	51	12	59	32	18	104	304	178
21 years	40	33	34	42	77	3	130	48	4	54	34	18	104	431	116
22 to 24 years	280	179	290	227	26	8	143	250	84	245	293	214	276	239	214
25 to 44 years	261	317	553	246	5	6	82	184	72	180	221	294	197	58	29
45 to 54 years	315	413	249	203	1	11	66	172	92	192	189	258	214	39	8
55 to 59 years	134	142	56	53	1	3	49	74	33	99	62	82	103	25	-
60 to 64 years	140	128	29	50	3	3	32	71	28	111	51	50	109	42	-
65 to 74 years	169	168	44	36	-	25	71	128	37	166	49	38	214	39	1
75 years and over	137	96	44	22	1	12	44	171	12	228	33	35	185	35	-
TYPE OF FAMILY AND NUMBER OF OWN CHILDREN															
All families	1 288	1 458	1 879	938	6	31	457	865	364	987	946	947	1 017	618	346
With own children under 18 years	617	787	1 443	604	1	6	134	417	195	427	559	573	428	139	345
Number of children	1 316	1 657	3 436	1 332	2	7	264	1 011	438	869	1 112	1 222	875	223	571
Husband-wife families	1 169	1 374	1 781	873	5	17	395	684	289	855	847	898	895	381	337
With own children under 18 years	577	747	1 366	555	1	4	111	307	137	367	499	539	372	128	226
Number of children	1 246	1 590	3 200	1 203	2	5	206	695	298	745	991	1 164	782	207	551
Percent of total under 18 years	90.0	94.2	91.1	91.4	4.7	50.0	71.3	42.2	57.9	79.4	87.0	93.9	86.3	74.5	88.6
Families with other male head	39	18	36	18	1	-	15	37	8	38	18	14	16	7	3
With own children under 18 years	7	4	13	3	-	-	4	13	2	11	7	7	5	-	3
Number of children	8	5	38	9	-	-	9	26	6	17	13	13	6	-	8
Families with female head	93	72	104	47	-	6	47	133	67	102	81	35	106	22	6
With own children under 18 years	33	36	44	16	-	2	19	97	36	49	33	27	51	11	6
Number of children	62	62	198	80	-	2	49	290	134	107	108	45	87	16	12
Percent of total under 18 years	4.5	3.7	5.6	6.0	-	20.0	17.0	25.9	26.0	11.4	9.5	3.6	9.6	5.8	1.9
Persons under 18 years	1 384	1 688	3 514	1 314	43	10	289	1 118	515	926	1 129	1 239	906	278	622
SCHOOL ENROLLMENT															
Enrolled persons, 3 to 34 years old	1 457	1 746	3 188	1 643	2 950	21	1 135	1 335	349	1 185	1 042	1 434	1 683	5 319	3 071
Nursery school	53	67	83	78	-	-	28	67	-	22	66	79	51	30	71
Public	-	11	20	22	-	-	8	31	-	-	7	14	-	10	17
Kindergarten	72	60	214	74	-	-	4	27	16	47	79	74	61	18	37
Public	72	60	207	74	-	-	4	27	10	47	79	74	57	18	37
Elementary	638	797	1 729	682	-	-	51	509	193	434	445	633	560	82	109
Public	548	714	1 604	556	-	-	51	509	193	434	445	633	345	82	87
High school	375	475	570	299	-	-	40	231	106	267	225	298	259	68	23
Public	367	463	542	275	-	-	34	231	96	266	225	285	259	68	23
College	314	347	574	609	2 950	21	1 000	501	34	335	247	350	952	5 021	2 791
Persons enrolled in school by age															
16 and 17 years	94.2	99.9	82.7	89.5	99.9	-	87.5	95.4	91.0	99.9	99.9	99.9	75.2	94.6	99.9
18 and 19 years	55.4	86.8	54.2	81.2	90.3	-	86.0	77.0	82.1	77.1	66.7	71.8	81.7	92.2	96.3
20 and 21 years	41.0	55.2	43.8	73.0	74.2	18.8	68.7	55.0	21.1	42.8	33.1	68.3	62.2	94.5	87.8
22 to 24 years	33.8	21.0	23.5	63.9	67.8	-	76.3	39.6	7.6	46.9	24.2	63.2	56.4	81.6	64.9
25 to 34 years	18.8	18.9	23.7	24.6	29.5	18.9	51.3	42.7	12.4	23.9	18.1	31.9	50.9	73.1	56.3
Percent 16 to 21 years not high school graduates	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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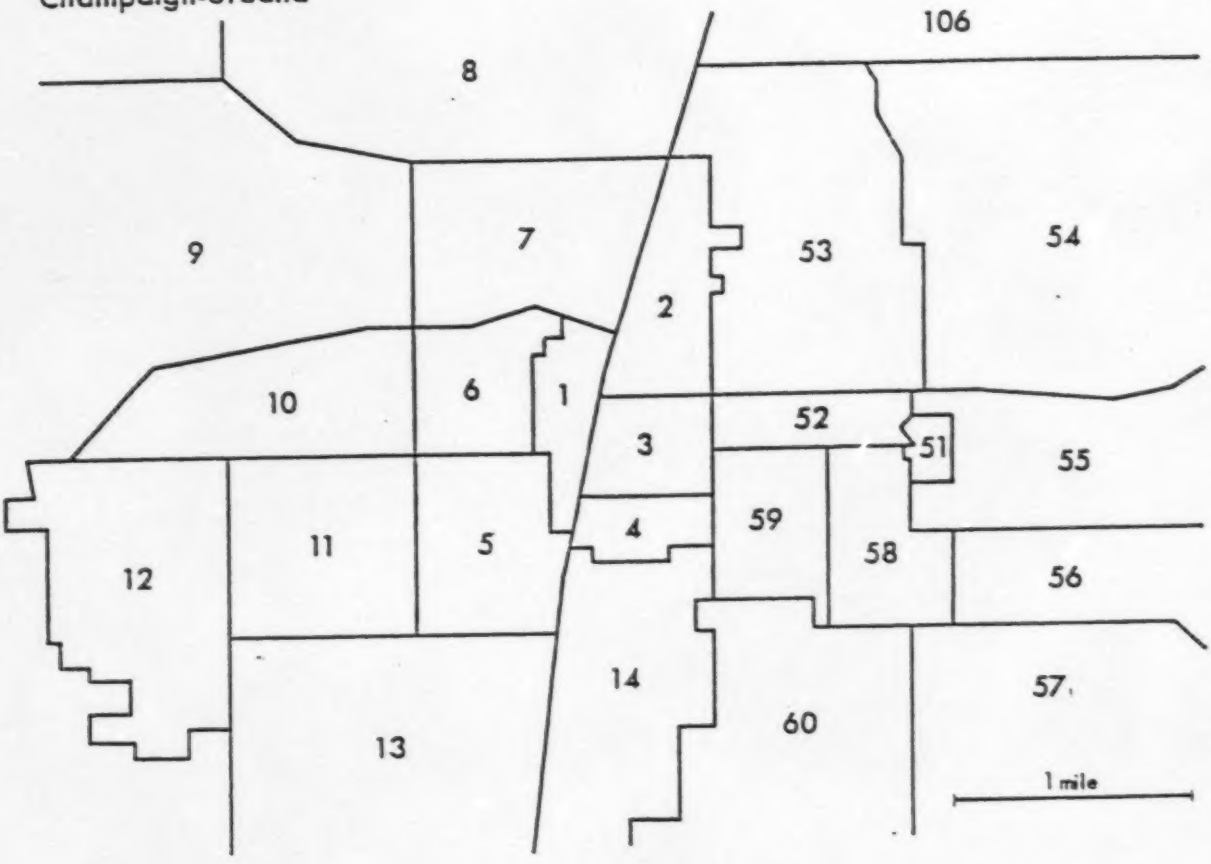
Table P-2. Social Characteristics of the Population: 1970

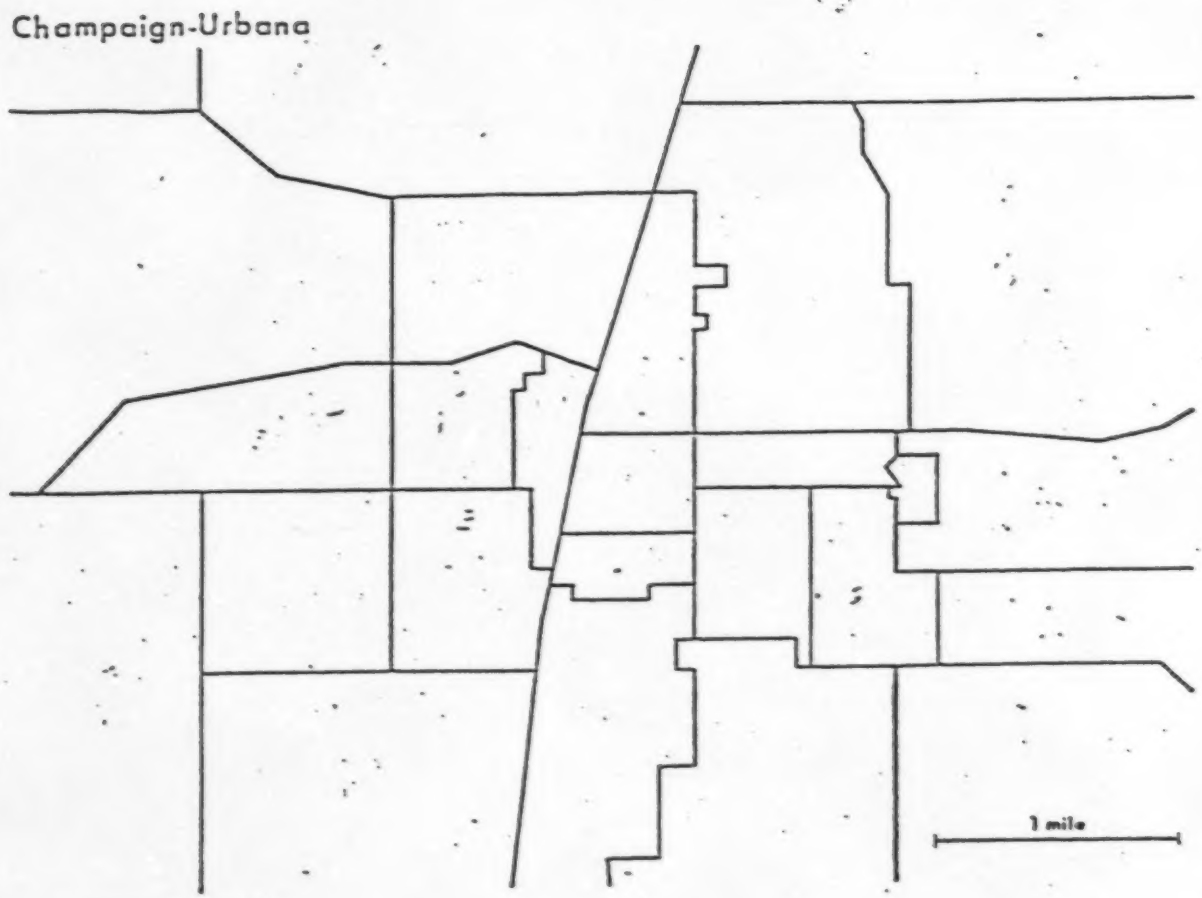
[Data based on sample; see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Census Tracts	Champaign County					Champaign								
	Total	Champaign	Rantoul	Urbana	Balance	Tract 0001	Tract 0002	Tract 0003	Tract 0004	Tract 0005	Tract 0006	Tract 0007	Tract 0008	Tract 0009
MEANS OF TRANSPORTATION AND PLACE OF WORK														
All workers	76 658	34 139	12 592	13 797	19 543	371	1 116	2 058	2 499	2 088	2 125	1 781	314	1 089
Private auto: Driver	42 176	14 650	7 086	6 923	13 517	118	644	587	546	1 462	1 281	1 176	220	1 343
Passenger	8 742	3 078	1 327	1 642	2 695	63	146	185	70	285	349	323	53	290
Bus or streetcar	985	333	12	440	180	30	20	-	19	17	53	4	11	31
Subway, elevated train, or railroad	436	14	415	7	-	-	-	-	7	-	-	-	-	-
Walked to work	11 740	4 032	3 252	3 649	806	127	58	1 092	1 327	130	156	68	-	36
Worked at home	2 850	791	95	367	1 597	9	42	79	181	54	104	22	14	38
Other	3 129	1 220	404	749	746	24	206	107	155	142	82	108	16	42
Inside SMSA	63 876	31 200	12 051	12 419	18 006	339	900	1 716	1 867	1 947	1 852	1 545	298	1 662
Champaign city	22 954	12 812	494	3 460	6 188	255	587	737	1 028	1 044	1 159	1 042	157	1 274
Urbana city	19 624	6 354	348	8 268	4 654	70	215	847	790	681	511	362	67	244
Remainder of Champaign County	21 298	2 034	11 209	691	7 164	14	98	132	49	220	182	141	75	194
Outside SMSA	2 149	803	191	305	850	-	4	58	60	29	88	69	15	79
Place of work not reported	4 633	2 136	350	873	685	32	212	276	572	104	188	87	-	59

Census Tracts	Champaign – Con.					Urbana					Urbana – Con.				
	Tract 0010	Tract 0011	Tract 0012	Tract 0013	Tract 0014	Tract 0051	Tract 0052	Tract 0053	Tract 0054	Tract 0055	Tract 0056	Tract 0057	Tract 0058	Tract 0059	Tract 0060
MEANS OF TRANSPORTATION AND PLACE OF WORK															
All workers	2 114	2 291	3 057	1 657	949	84	1 313	1 378	548	1 458	1 337	1 581	2 066	2 587	1 34
Private auto: Driver	1 478	1 780	2 421	1 329	171	14	515	763	332	1 115	1 133	1 257	972	343	47
Passenger	417	282	395	181	39	6	157	225	107	343	236	146	232	81	9
Bus or streetcar	32	29	32	23	32	7	35	48	-	37	12	13	33	44	21
Subway, elevated train, or railroad	-	7	-	-	-	-	-	-	-	-	-	-	7	-	-
Walked to work	57	53	54	71	614	38	327	155	13	85	31	21	375	1 801	35
Worked at home	57	64	83	5	39	-	8	5	22	25	46	39	73	102	-
Other	75	79	72	48	54	36	71	72	44	55	69	25	184	134	-
Inside SMSA	1 982	2 122	2 876	1 530	563	58	1 242	1 229	529	1 320	1 423	1 455	1 839	2 164	1 12
Champaign city	1 253	1 275	1 731	894	424	37	440	471	157	387	504	282	511	393	3
Urbana city	504	627	849	473	114	22	708	644	285	937	814	1 045	1 292	1 667	7
Remainder of Champaign County	225	220	296	163	25	8	102	124	87	194	103	128	36	84	
Outside SMSA	62	99	111	90	39	-	-	29	6	51	53	12	56	38	1
Place of work not reported	72	72	70	37	347	-	71	20	5	79	51	34	171	303	

Census Tracts
Champaign-Urbana




Champaign-Urbana
1 mile
Census Tracts

Feedback 5: Gather information/ Organize data.

The group produced the attached maps of day care center demand areas.

Map 1: Demand for Day Care

We assumed that working mothers with children under six are the sole demand for day care, that each mother has only one child. Of that number, we assumed that 45% would be in the maket for day care (estimate from survey data) so that .45 x the number of women in the labor force with children under six was our estimate of the demand for each census tract. We subtracted this number from the number of places already available and got an estimate of unmet demand, with a negative number indicating a demand for day care that is not being met within the census tract, if day care centers are located with respect to residence.

Map 2: Drawing Areas of Day Care Centers

Assuming that a new day care center can't compete with established day care centers, and the average drawing range of a day care is a half mile, we estimated area of probable exclusion.

Map 3: Possible Employment Demand, Existing Centers that Are Full, and Centers which Take Infants.

If day care centers are located with respect to employment instead of residence, then the major areas of employment would be major areas of demand. It's particularly difficult to estimate demand precisely, because a) many people may live so far away from their place of employment that transporting a child that distance would be impractical, b) we have no indication of the sex ratio, or the percentage of women who are working mothers at the different locations, and c) we have no way of estimating how many students are in need of day care (because of more flexible schedules, students may be making increased demands on nursery schools).

Also identified on this map are the centers which are currently full (which might be an indication of excess demand, although it's difficult to tell precisely, because other day care centers may be located nearby), and day care centers which take infants.

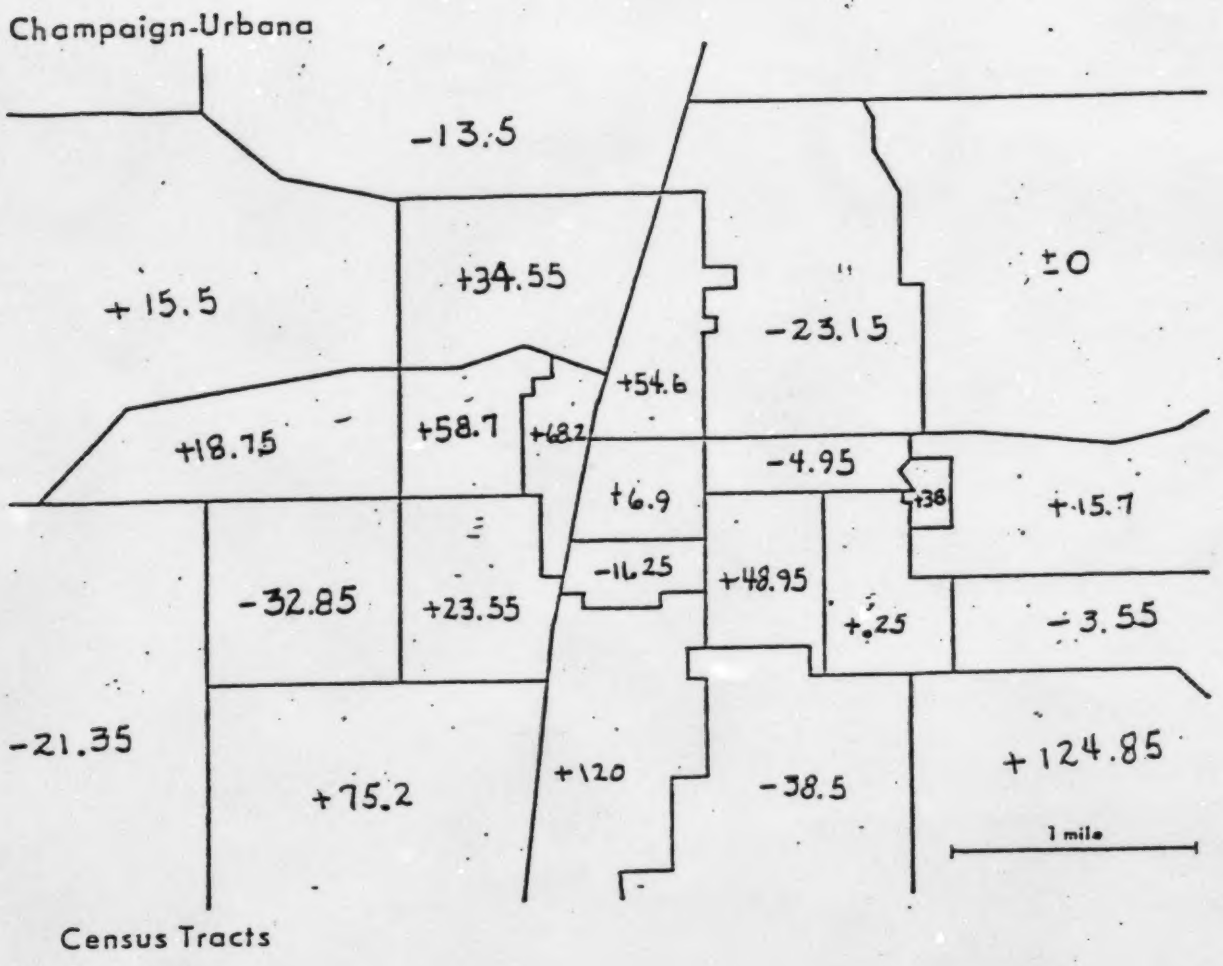
"Boy," said Jan. "I'm not sure this is going to work. An awful lot of the area's demand for child care seems to be met."

"I'm not as pessimistic," responded Don. "Let's see how many areas we can identify which could support a day care facility, and describe the assumptions we used to make each estimate.

Instruction 6: Generate possible solutions

Synthesize your data into one map that gives you some ideas about where there are some likely regions for locating a profitable day care center.

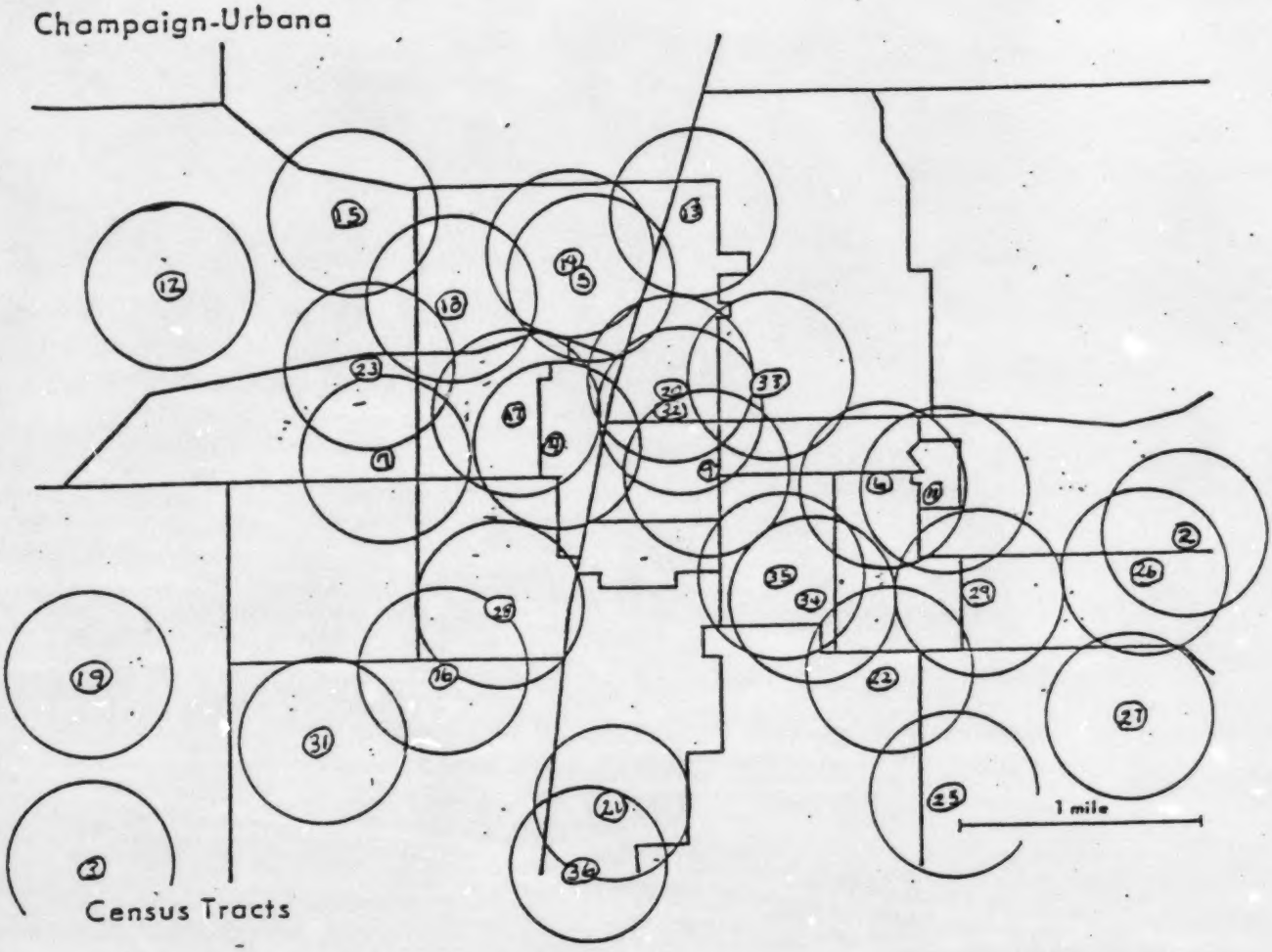
Map 1



Index = existing day care center capacity - .45 x working women w/ children under six

Negative numbers estimate demand not being met by existing day care facilities.

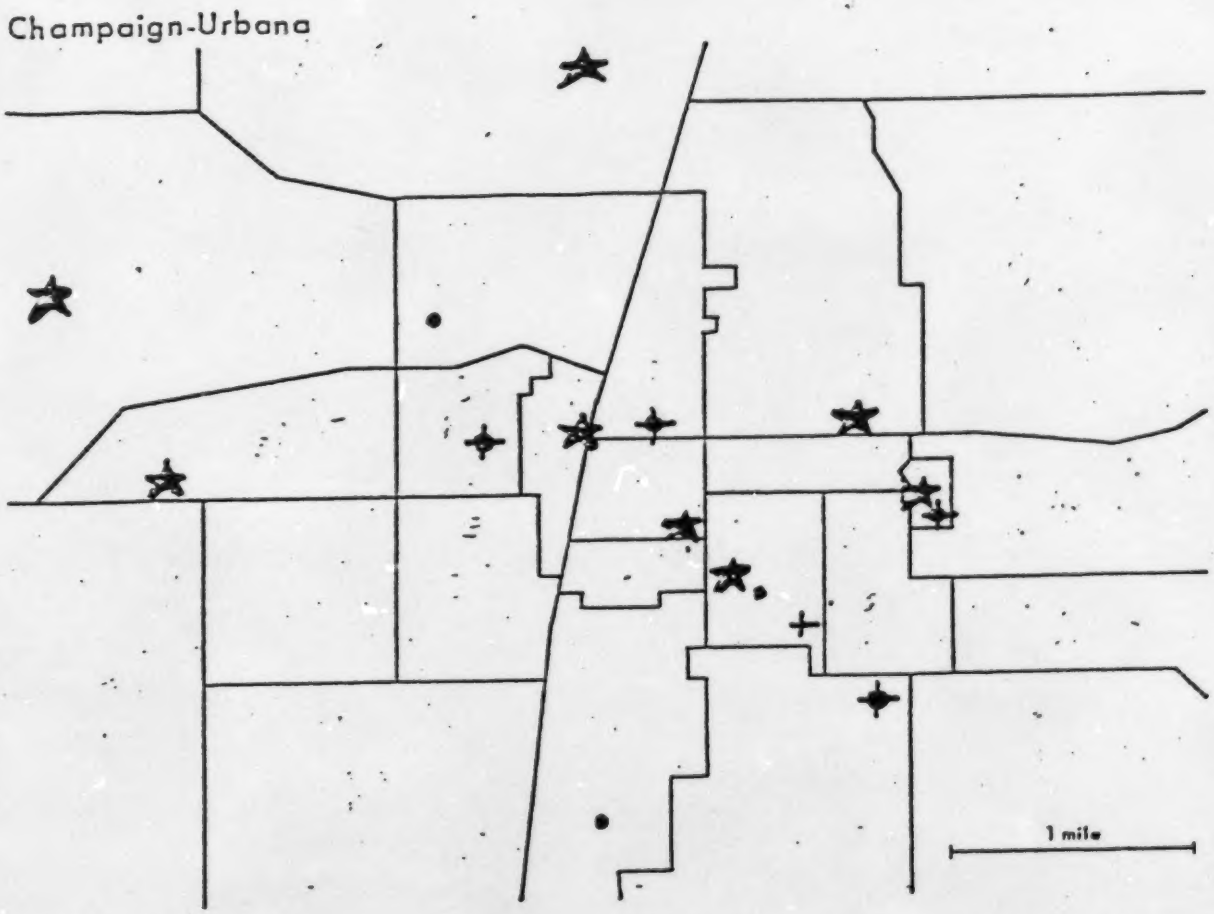
Map 2



Areas within a half mile of an existing day care center.

Map 3

38



Areas where there might be employment associated demand.

Day care centers that are currently full.

Day care for infants (less than two years).

Feedback 6: Generate Possible Solutions

The group generated the attached map synthesizing several of the factors related to the demand for day care.

"Well," said Donna "This has certainly benn interesting, but we still have a lot of unanswered questions. For example, the areas of high employment are often the areas best served by the existing centers."

"None the less,"responded Jerry,"I think we've taken the available data and this mode of analysis about as far as it will go. We're just going to have to make some decisions about where we should begin to look for a specific site."

Instruction 7: Evaluate/Generate Final Solution.

Write a justification of your final location decision., Includein your essay:

1) the criteria for estimating minimum demand needed for a financially feasible day care center.
2) any assumptions you made about age of children, clientel, or transportation availability.
3) where you will locate the center, and why that location is the best location in the area.
4) Any other factors which you considered in making the final decision.

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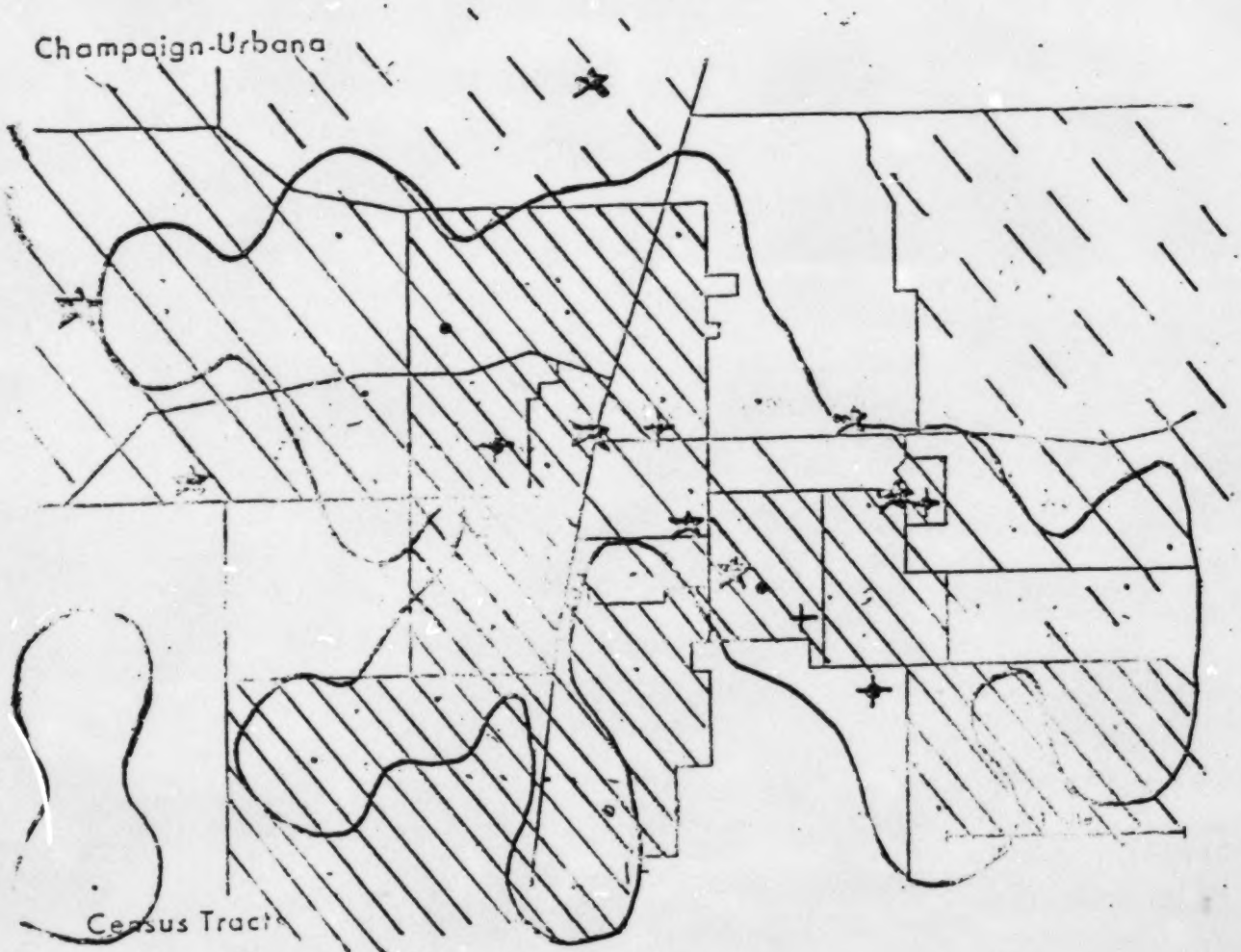
Synthesized Map of Day Care Demand



Extra day care slots

substandard deficit (below -20)

deficit (0 - -20)

excess (1 - 20)

substantial excess (above 20)

- areas with ½ mile of a day care center.

- areas of potentially high employment focused demand.

- day care centers without excess places.

- day care centers

- day care centers taking children younger than two years.

APPENDIX 5

FEMALE-MALE DIFFERENCES IN SPATIAL BEHAVIOR
A STUDENT PARTICIPATION UNIT

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Introduction

Differences in the behavior of women vs. men have interested geographers, just as they have interested other social scientists. Research on the topic has included Peter Gunderson's "Time-Space Constraints on Suburban Women in San Mateo County, California," Bonnie Loyd's "Male and Female Differences in Spatial Mobility," and Pred and Palm's "The Status of American Women: A Time-Geographic View." What these and other research efforts point out is that women function in space differently than men. They occupy different places in a day's time; they travel to different locales; different spatial zones hold more meaning to one gender than the other.

Students, irrespective of sex, age, and level of instruction, recognize female-male differences in spatial behavior. Their conceptions may be accurate reflections of reality; however many of the images students have may actually be stereotypes without basis in fact. Some students may assume that woman's place is or should be in the home with little contact beyond these confines. Others may suggest that the behavior patterns of women and men in fact differ very little, that the spatial behavior of one sex is insignificantly different from that of the other. Both positions are extreme and unrealistic.

The attached teaching module provides a device by which the student can reflect on his or her image of how women and men operate through space on a day to day basis and throughout the year. Students are directed to estimate how much time is spent at home and in the zones of space located away from home. Likewise, they estimate how far individuals travel in a year's time. The exercise is done for a wife and a husband of a hypothetical family. The unit provides the instructor with an opportunity to introduce geographical concepts and at the same time enter into the issue of the position of women in society, a topic of great concern to students today.

History of the Unit

The unit was devised as an experiment to accompany a course in human geography taught at Florida Atlantic University during the spring of 1978-79. The students were for the most part juniors and seniors, and about half were geography majors. Most students in the course had had previous training on statistical analysis of data and on the use of the computer (hence the inclusion of computer card exercise on the attached module). The unit was a part of a course in which other modules of a feminist nature were required; in fact, the students were told from the first day that the course would largely be concerned with the position of women in society; this was the only major departure from a standard human geography offering. The text was DeBlij's Human Geography.

Objectives of the Unit

The unit was seen as a device to introduce two stated areas of curriculum: (1) the concepts of world view and spatial behavior, and (2) the notion of differences in the spatial behavior of one sex vs. the other. A third but unstated objective was consciousness raising regarding sexual inequality and discrimination.

World View and Spatial Behavior

All individuals have their own conceptions of spatial reality. They have a world view, a mental map, which is composed of places and spaces of which they are aware. These locales are sometimes known directly through experience--the home for example is so known--or they may be known abstractly through the education process--Siberia, for example, for most Americans is only known abstractly. The present teaching unit begins by making the student aware that each individual has a world view, and that each person's view is distinct and unique. Phenomenological awareness of the space of one's world appears to be quite enlightening to students.

For the purposes of this unit, the space of an individual is broken into four types (called "zones," or "levels"). These four types are given labels: domestic space, neighborhood space, district space, and "far country." (The latter term comes from Spencer and Thomas.) Domestic space is the house and yard. Neighborhood refers to the zone immediately beyond the house; the work place is in neighborhood space, and one's "town" may be entirely within this space type. District space extends many miles outward, and for most individuals would be within perhaps a fifty-mile radius of home. Beyond is "far country," space which is reached on major trips involving over-night stays.

Not only do individuals attend to, and reflect upon their space levels, they also operate within them. That is, they travel within levels and journey from near levels to far levels. This travel is called "spatial behavior." Students are asked to reflect upon the notion of spatial behavior as defined, and to recognize that they (all adults in fact) are free to operate in one zone or another. They are shown that in a year's time, individuals occupy various space types. Which ones they inhabit most frequently depend upon many variables, of course, though for most individuals home space is occupied by far the greatest proportion of the time.

Sexual Differences in World View and Spatial Behavior

The next objective is to provide understanding of those qualities of a person's world view or spatial behavior which are based upon sex. The students are first presented with the assertion that women and men do indeed have different world views. Folklore, common wisdom, and such pop culture media as advertisements would have us believe that the woman in a typical family attends to space close to home to a far greater degree than the man does, and concomitantly, men attend to neighborhood (including "office"), district, and far-country space levels more intently than do women. The objective in doing the module is in large part to allow the student to record on paper the degree to which this stereotype is accurate or inaccurate. The bulk of the student work is estimating the amount of time spent during the day at home, in the neighborhood, or at farther locales. Also distances are estimated: how far away from home does the woman and the man travel in a year's time? Again, the objective is to generate data which will demonstrate that the students' images of women's travel time and distance will vary from their estimates for men.

Feminist Objectives

The value of introducing in a geography class the topic of discrimination against women has been examined elsewhere ("Feminist Approaches in Teaching Geography"). By using teaching materials such as this one, an instructor can legitimately stimulate discussion on the sensitive issue of women's rights and the status of women in society within a geographical context. One of the objectives specifically is to question if the hypothetical family with which the students work is indeed "typical." If so, is the division of labor in the family (which is revealed in the diary of the travel of mother and father) an equitable way to divide the various tasks required for household maintenance?

Procedure for the Unit

Students are introduced to the concept of world view through lecture. They are directed to read the first chapter of Spencer and Thomas's Introducing Cultural Geography, in which the concept is discussed in general without empirical references. They also read "Space Levels of a Sudanese Villager," which examines personal space, domestic space, village space, region space, and the World of Islam, viewed through the eyes of a villager along the Nile in Northern Sudan.

The students have already been alerted that the course will take a feminist slant, and after discussing generally world view and spatial behavior, the question is raised, how does the world view and spatial behavior of women differ from that of men? Discussion in class brings out that any empirical testing of hypotheses on this subject would involve a tremendous undertaking of observing the spatial behavior of many persons of each gender throughout a year; this obviously is unachievable. Therefore students are told that they will estimate the data which they think would be generated from such a research undertaking.

The class is then provided with the directions to the project, as well as some blank "spatial activity logs" (attached). They are given a week to complete all but the computer card punching exercise. After the week, the logs are handed in, and class time is spent discussing the project. The students are quite animated at this point, and freely discuss their estimates and their reactions generally. Some common reactions are:

> "I didn't realize how much time a housewife spends at home."
>
> "I saw that getting the woman out of the house more would mean that the husband would have to spend more time at home. That was hard to do."
>
> "It was difficult for me to place the woman at home. My mother always worked, and I guess I don't know what women do if they stay at home."

To the frequently-encountered beligerant challenge "Don't you feel many women should be happy at home as housewives?", I point out that if life at home were so great, why do men spend so little time there? Perhaps society's true injustice is depriving men of their fair share of time cozily spent in domestic space.

Discussion moves in the direction of how typical is the hypothetical family in question? Most students find the stereotype nuclear family with wife at home to be quite typical. The instructor asks the students to estimate the percentage that such families are of all American families; virtually all estimates are too high. (Ms Magazine reported U.S. census figures that such families constitute only sixteen percent of all U.S. families.) Most students discover that their concept of "family" is based more on the Marabel Morgan/Anita Bryant mythology than in actual fact. More families (19%) function with both parents employed than with only the man employed.

The discussion also centers on the equity of the time/distance division of labor. Most students take a liberated position; only a few (mostly male) students have allowed a hint of traditionalism to creep through.

Students are then told to enter the data values which they have generated onto punch cards. This was appropriate for the experimental class because most students had been introduced to computer work before. Some had not, but they were shown how to punch cards by colleagues. The instructor ran a simple procedure (SPSS) to obtain some descriptive statistics on all variables. The means of the variables were reported in class to show the students where their estimates fit in the context of the estimates of the class as a whole; little else was done. (Eventually the instructor hopes to gather enough data to permit detailed analyses, such as determining if the views of female students differ significantly from those of male students. Because the experimental class was rather small, this was not done.) Another reason for having the students punch their data onto cards was to provide a check for accuracy. For example, simple COMPUTE commands allowed for the summing of all the hours spent in all space zones to generate new variables: Mother's Total Yearly Hours, and Father's Total Yearly Hours. Dividing by 365 should have produced 16 (sixteen waking hours in a day). Most students were accurate. With some students, however, numbers as low as 12 and as high as 39 were obtained (thirty-nine hours per day spent in space zones of one type or another!). Students who were careless in following directions, then, produced spurious data sets, and the computer run allowed the instructor to discover who had made mistakes.

Conclusion

This module proved to have strengths and weaknesses. The objectives were met to the satisfaction of the instructor, especially the feminist objectives of using the discussion of spatial behavior as a vehicle for involving students in the issue of sexual equity in the home. Also, students felt comfortable with the concepts of world view and spatial behavior. In spite of the fact that a few students "freaked out" when told they would punch the data on cards, in the end they all punched cards successfully; a few novices were quite pleased to be "working with computers."

On the negative side, since this was the first go-around some confusion as to requirements resulted. The handout the students received had some vagueness which (hopefully) has been eliminated from the present version. Some students were reluctant to enter into "women's lib" topics and throughout the course these students remained dissatisfied.

Overall, however, the project was most successful, a valuable addition to a traditional human geography course.

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Loyd, Bonnie, "Male and Female Differences in Spatial Mobility," *Proceedings,* Middle States Division of the Association of American Geographers, Vol. 7 (1973), 23-25. Loyd has compiled bibliographies of work done in geography on women. See, for example, *Women and Geography: An Annotated Bibliography and Guide to Sources of Information,* Council of Planning Librarians Exchange Bibliography, No. 1159 (Monticello, Ill., 1976), and "Women and Geography: A Resource List," *Transition,* Vol. 6, No. 4 (1976-77), 1-9. Her bibliography is updated annually.

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Spencer, J. E., and Thomas, W. L. *Introducing Cultural Geography.* New York: John Wiley & Sons, 1973.

"Who Is the *Real* Family?" *Ms.,* August, 1978, p. 43 and cover.

The following is a hypothetical, stereotypical middle-class family living in Boca Raton:

The wife does not work,* nor does she go to school: she is a "typical housewife." The husband is in business or is a medium-level professional; his earnings are in the mid twenties. The family has two children, aged seven and ten; both go to public school. The family lives in a four-bedroom house worth approximately $75,000. The family has a Ford station wagon and a subcompact car. No grandparents or other close relatives live in the immediate area. The family is healthy, happy, successful; typical Americans.

Your assignment is to describe the spatial activities of the mother and the father for a typical year. To do this, you begin with a single day, work up to a week, then a month, and finally the year.

Daily Log

Begin with the Daily Spatial Activity Log for a typical Monday morning. Indicate where the mother and the father would be at various times throughout the day. If time is spent at home, indicate "home" or "D" (for domestic) in the appropriate time blocks. If a journey away from home is taken, indicate the time spent for the journey and the number of miles covered. For time spent away from home, determine where this away-from-home time is spent (e.g., office, shopping, club, church, etc.); indicate the amount of time spent for each category. This should equal sixteen hours (we assume sixteen waking hours in the day). Sum the miles for all trips in the day, and enter this figure at the bottom of the sheet. Do this for each of the seven days of the week.

On a separate page indicate the total number of miles for the week (sum of each of seven days). Divide this figure by 7 for a daily average. Likewise, sum the time spent in domestic space, office, shopping, and whatever other categories you designate. The figure for all "other" (non-domestic space) time will also be summed and entered as neighborhood space. All the times should total 112 hours (16 waking hours x 7 days). Divide the domestic space figure by 7 for average daily domestic space time. Divide the neighborhood space figure by 7 for average daily neighborhood space time.

Monthly Log

In a typical week individuals may not routinely venture beyond the immediate environs of their local community; yet people do occasionally journey into areas beyond their own towns. To accommodate for journeys into district space and "far country," fill out the Monthly Spatial Activity Logs for each of the twelve months. (Two months can fit on one sheet.) Only spatial activities which vary from the daily normal (which you determined on the daily logs) need be recorded. If, for example, you estimate that in February no variation from normal takes place, simply multiply your daily average miles by 28 and enter this figure. If variations are expected, indicate the nature of the trip(s) and the total number of miles covered by the journey(ies). (For example, if the father takes a business trip, indicate the destination and estimate the number of additional miles.)

Similarly, estimate the amount of time spent in spatial activities which differ from the norm. If a person is out of town for two days, compute the time as follows: 2 x 16 = 32 waking hours out of town.

*That is to say, she does not get paid for her work.

To arrive at monthly totals, sum the number of additional miles which are the result of trips outside the local area. Add this figure to the total routine trips for the month that the person was at home (average miles per day times the number of days in that month that the person was residing at home). For time totals, add the amount of time spent in travel to "district" or "far country" space. Reduce the amount of time spent in spaces nearer to home by these amounts. Enter the totals on the bottom of the sheets.

Coding the Values on the Punch Card

The information which you provided for the mother and father will be entered on a punch card. Sixteen items of information relating to time and distances will be entered, eight for the mother, and eight for the father. Moreover, the sex of the student will be entered, and a Student ID Code Number will be recorded.

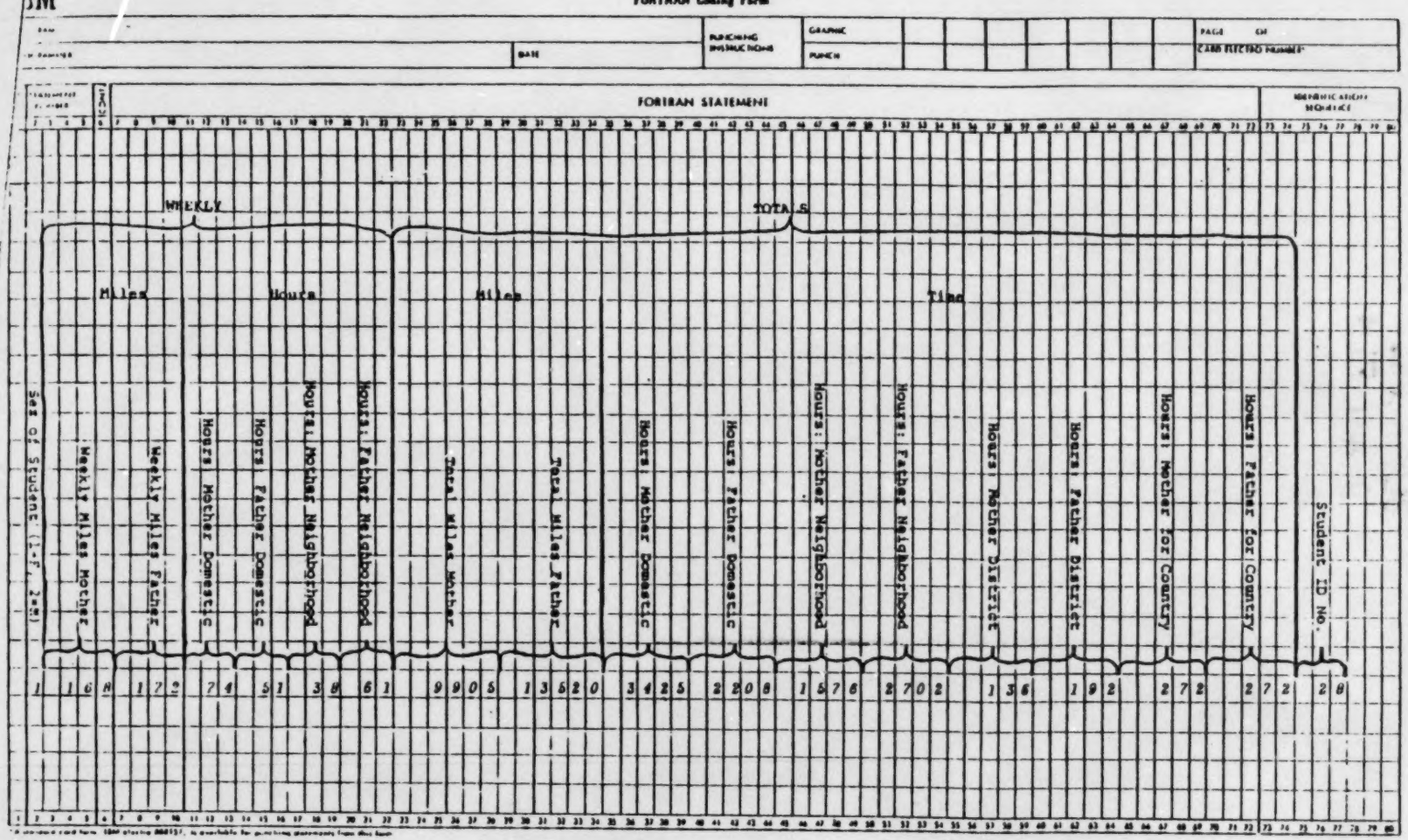
Students who have not previously worked a key punch machine will be given special instructions. In general, a card contains eighty columns; you will require seventy-seven. Particular data values will be entered into certain columns. Numbers are right-hand justified. For example, if you have six columns assigned to record a particular data value and your actual number is only four digits, leave the first two columns blank. Mother's total miles is recorded in columns 23 to 28. If your value is 9905 (a four-digit number), you would enter the number as illustrated below. Note that columns 23 and 24 are left blank.

column:	23	24	25	26	27	28	29
			9	9	0	5	

The columns to which the data values are assigned are indicated below. On the next sheet is an example of a typical card.

Coding Sheet for Spatial Behavior Diary

Column	
1	(blank)
2	Sex of student: punch 1 if you are a female, 2 if you are a male
3-6	Weekly miles: Mother
7-10	" " Father
11-13	Weekly hours: Mother's domestic space
14-16	" " Father's domestic space
17-19	" " Mother's neighborhood space
20-22	" " Father's neighborhood space
23-28	Total miles: Mother
29-34	" " Father
35-39	Total hours: Mother's domestic space
40-44	" " Father's domestic space
45-49	" " Mother's neighborhood space
50-54	" " Father's neighborhood space
55-59	" " Mother's district space
60-64	" " Father's district space
65-69	" " Mother's far country space
70-74	" " Father's far country space
75-77	Student ID Code Number (Provided by instructor)
78-80	(blank)



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APPENDIX 6

INSTRUCTOR MATERIALS DRAFT

GEOGRAPHIC PERSPECTIVES ON WOMEN

SUGGESTIONS FOR AN UNDERGRADUATE SEMINAR

Prepared with the support of the U.S. Office of Education Women's Educational Equity Act Grant No. G007802252.

Introduction

Although the project modules have been developed for introductory courses, they have also been used in more advanced classes as the basis of small group discussions or group projects. The suggestions offered below draw on such experience in classes taught by Professor James Landing at the University of Illinois - Chicago Circle, Professor David Lee at Florida Atlantic University and Professor Janice Monk at the University of Illinois Urbana-Champaign. They also reflect discussions of the project staff as modules were prepared and implemented by participant instructors. If you are interested in organizing a seminar, additional ideas are discussed in several articles in the Journal of Geography, 77, (5) 1978.

Pervasive Questions

The following questions are likely to emerge at some point during the discussions. You may find it appropriate to introduce them at the beginning of the series, return periodically and review at the end.

1. Are women omitted from most geographic texts and studies? Does this mean we should seek to develop and study supplementary materials on women?

2. Are women presented in a narrow set of roles in geography? Does this mean we should seek to diversify the treatment of women?

3. Are there sex differences in environmental relationships and spatial behavior? Does this imply a comparative treatment of males and females is needed in geographic literature?

4. Can the geography of women (or men) be properly understood without studying the geography of the other sex? Does this imply a dialectical approach? (Consider the parallel with geographic studies of development and underdevelopment, for example.)

5. What accounts for the present treatment of women in the geographic literature? What is the influence of scholarly traditions in the discipline (e.g., links with the physical sciences, or a predominantly male group of scholars)? How does human geography compare with allied fields (e.g., sociology, anthropology) in its attention to women and in its proportions of female scholars?

6. How does one deal with arguments that the geographic study of subgroups in a population, such as women, is inappropriate? Is it appropriate to develop a geography of women as opposed to a geography of society?

7. In what ways can academic study contribute to social change? Should emphasis be placed on factual information, alternative modes of analysis, or on explorations of values? Can academic study contribute only if it adopts a radical perspective?

The Modules

In each module the "Instructor Materials" packet contains a number of discussion questions and suggestions for research projects which could be adapted for use with a seminar group. The following questions or projects represent some additional ideas.

1. Women and the Cultural Landscape

i) Review anthropological literature on selected hunting and gathering societies (See Reiter and Reed items in bibliography for possible sources.) How would you evaluate Sauer's arguments based on your own interpretations of the anthropological literature?

ii) How does knowledge or thinking about women in history and prehistory influence your own views about contemporary women? (Note: We have tentative evidence that introducing material on women's contributions may lead to a greater reassessment of existing views by male students than by females.) Explore with women students whether they feel discussions of women's historical contributions in food production and homemaking reinforce contemporary stereotypes.

2. Women and the Built Environment

i) Research by Roger Hart* in natural settings shows ways in which parents react differently to the spatial behavior of boys and girls. Girls are restricted and tied more closely to the home base, whereas boys are more readily excused if they venture beyond accepted limits. What might be the consequences of such treatment for the spatial behavior of adult men and women?

ii) It may be possible to research the residential patterns or preferences of single men and women. How do they vary? Might the patterns for women reflect differences in spatial socialisation, or do they seem to reflect primarily economic constraints?

3. Locational Decision Making: The Case of the Day Care Center

i) How might the needs for day-care vary between different sub-groups in society? Consider women of different ethnic, income or occupational categories. (The Mårtensson article in the bibliography pays particular attention to workers on irregular shifts.)

ii) What are the implications for women's employment of an expansion of the day care system? In what kinds of locations might day care be provided (e.g., home, mother's work place, central location)? Do we assume that employment in day care is a woman's job? Conduct comparative literature review of day care systems in other cultures (e.g., China,

*Roger Hart, Children's Experience of Place, John Wiley, New York, 1979.

Soviet Union, Sweden, Israel) with the American system. How are they similar or different in terms of location and time-space geography?

iii) Discuss how you might plan a research project on the action space of children in day care centers in your community compared with children who are primarily in their family homes (see Mårtensson).

4. Village to Barriada: Contemporary Female Migration to Cities in Latin America

i) The migration of women to cities in Latin America is associated with social changes for the individual migrant, but it also has an impact on the larger population in the sending rural areas and the receiving urban areas. Discuss ways in which migration might influence (a) population composition; (b) labor force composition; (c) social relationships between men and women; (d) housing and social welfare provision.

ii) If men, rather than women, predominate in an urban migration stream, how might the impacts be different than those you have identified above?

5. Geographic Perspectives on Social Change: The Example of Women and Crime

i) Women's involvement in crime has been shown to vary internationally. What other aspects of women's social status and behavior vary between cultures? What kinds of factors seem to influence the patterns of cross-cultural variation? The following articles would be useful resource material.

D.R. Lee, A.J. Stewart and D.G. Winter "The Geography of Female Status: A World Wide View," Transition 9, (2) 1979, pp. 2-7. This article is expanded in A.J. Stewart and D.G. Winter, "The Nature and Causes of Female Suppression," Signs: Journal of Women in Culture and Society 2, 1977, pp. 531-553.

ii) There are substantial differences in the laws affecting women in different parts of the United States. Students might attempt to collect data on some particular category of laws - e.g., divorce laws, and speculate on the causes for geographic patterns observed. The following papers would provide useful resource material:

Nancy Erwin, (Jackson State University) "Regional Variation in the Legal Rights of Women," Paper presented at the Annual Meeting, Southeastern Division, A.A.G. 1978.

M. Libbee and D. McGee, University of Oklahoma, "Spatial Variations of Some Factors Related to the Women's Movement," paper presented at the annual meeting, A.A.G., Philadelphia, 1979.

E.H. Wohlenberg, Indiana University, "Correlates of Equal Rights Amendment Ratification," paper presented at the Annual meeting, A.A.G. Philadelphia, 1979.

iii) It may be possible for students to map and analyze spatial patterns of women as victims of rape, drawing on data from the Uniform Crime Reports. It is sometimes thought that changes in the levels of incidence of rape reflect attitudes towards reporting rather than changes in the actual incidence of rape. Students might discuss how they could investigate this hypothesis (e.g., they might suggest comparing the distribution of chapters of Women Against Rape with changes in reported rape rates).

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APPENDIX 7

Course Objectives

1. To obtain an overview of world patterns of culture
2. To examine the distribution of specific cultural characteristics
3. To examine in detail tribal, traditional and modern cultures

Texts

Benedict, Ruth Patterns of Culture

Zelinsky, Wilbur The Cultural Geography of the United States

Additional readings on reserve in the library

Grading

1. Class attendance and participation in 5 discussion sections
2. Reading Logs
3. Paper/presentation
4. Final Examination

Course Outline

week	topic	assignment
1.	Introduction to Cultural Geography, Culture Hearths	
2.	Culture Realms; Introduction to Mentifacts, Sociofacts, Artifacts	Z:66-77
3.	Mentifacts: Religion and Language	
4.	Sociofacts: Family Size and Political Institutions	Log I
5.	Introduction to Tribal, Traditional, and Modern Cultures	Patterns
6.	Tribal Cultures: Pueblos	"
7.	Tribal Cultures: Dobu and Northwest Coast of America	"
8.	Traditional Cultures	Log II
9.	Modern Cultures	Zelinsky
10.	Modern Cultures	"
11.	Summary and paper presentations	Log III
12.	Final Exam	

Reading Logs

To construct a reading log, one must select, read and take notes on the specified number of pages of material contained in the reading log list. At least one article must be selected from each part of the list. Grades are based on the amount of material read, the quality of the notes, and the demonstrated understanding of the readings in discussion sections.

Paper/Presentations

The presentation should be well prepared, about 20 to 30 minutes long; the paper should be typed and free of error in grammar, punctuation, capitalization, and spelling. The paper should be about 10 to 20 pages.

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READING LOG II: CULTURE & CULTURE CHARACTERISTICS

Instructions

Select, read and take notes on a minimum of fifty (50) pages of material taken from both Part A and Part B of the reading list. Grades will be based on the amount of material read, the quality of the reading log notes, and the demonstrated understanding of the readings in the discussion sections.

Part A: Culture Origins

Flannery, Kent V. "The Ecology of Early Food Production in Mesopotamia," pp. 283-307 in ECB and pp. 92-107 in CG:SR; from Science, v.147 (March, 1965)n. 3663:1247-56.

Kroeber, Alfred L. "Relations of Environmental and Cultural Factors," pp. 350-361 in ECB; from Cultural and Natural Areas of Native North America, Berkley, California: University of California Pbulications in American Archeology and Ethnology, v. 38, 1939.

Sauer, Carl O. "Herdsmen and Husbandmen," pp. 372-81 in ORG; from Seeds, Spades, Hearths, and Herds, Cambridge, Mass: MIT Press, 1969.

Sauer, Carl O. "Agency of Man on Earth," pp. 3-28 in CG:SR; from William L. Thomas, ed. Man's Role in Changing the Face of the Earth. Chicago: University of Chicago Press, 1956, pp. 49-60.

Part B: Culture Characteristics

Blum, H. F. "Is Sunlight a Factor in the Geographical Distribution of Human Skin Color?" Geographical Review, v. 61 (1971):557-581.

Broek, J. O. M. "National Character in the Perspective of Cultural Geography," Annals of the American Academy of Political and Social Sciences, v. 370(March, 1967):8-15.

Isaac, Eric "The Citron in the Mediterranean: A Study in Religious Influences," pp. 230-9 in CG:SR; from Economic Geography, v. 35 (Jan., 1959):71-78.

Kristof, L. K. D. "The Nature of Frontiers and Boundaries," Annals of the Association of American Geographers, v. 59 (1969):613-31.

de Laubenfels, David J. "Australoids, Negroids, and Negros: A Suggested Explanation for their Disjunct Distribution," Annals of the Association of American Geographers, v. 58 (March, 1968) n. 1:42-50.

MacKinder, Halford J. "The Geographical Pivot Point of History," pp. 707-719 in ORG.

Rapoport, Amos House Form and Culture. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1969

Simoons, F. S. Eat Not This Flesh: Food Avoidance in the Old World. Madison, Wis., 1961.

READING LOG I

Wagner, Philip L. "Remarks on the Geography of Language," pp. 219-229 in CG:SR; The Geographical Review, v. 48 (Jan, 1968):86-97.

Whiting, John W. M. "Effects of Climate on Certain Cultural Practices," pp. 416-455 in ECB; from W. H. Goodenough, ed. Exploration in Cultural Anthropolgy, New York: McGraw-Hill, 1964, pp. 511-544.

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READING LOG II: TRIBAL & TRADITIONAL CULTURES

Instructions

Select, read and take notes on a minimum of 100 pages of material. At least one article must be selected from each part of the Log. Grades will be based on the amount of material read, the quality of the notes, and the demonstrated understanding of the readings in the discussion sections.

Part A: Historical Perspectives on Cultures

Sauer, Carl O. "Early Relations of Man to Plants," pp.155-181 in L&L*.

_____ "Environment and Culture during the Last Deglaciation," pp.246-70 in L&L.

_____ "Fire and Early Man," pp.288-299 in L&L.

_____ "Seashore - Primitive Home of Man?" pp.300-312 in L&L.

_____ "Sedentary and Mobile Bents in Early Societies," pp.256-66 in Social Life of Early Man, ed. by Sherwood L. Washburn, Chicago: Aldine, 1961.

Part B: Selected Perspectives on Tribal Societies

Brass, L.J. "Stone Age Agriculture in New Guinea," Geographical Review, v.34 (1944):555-6

Chang, Jen-hu "The Agricultural Potential of the Humid Tropics," Geographical Review, v.58 (1968):333-361.

Conklin, H.C. "The Study of Shifting Agriculture," Current Anthropology, v.2 (1961):26-61.

Dalton, George, ed. Economic Anthropology: Essays on Tribal and Peasant Economies. New York: Basic Books, 1971.

Fliender, Dietrich "Pre-Spanish Pueblos in New Mexico," The Annals of the AAG, v.65 n.3 (Sept.,1975):363-378.

Harris, D.R. "The Ecology of Swidden Cultivation in the Upper Orinoco Rain Forest, Venezuela," Geographical Review, v.61 (1971):475-495.

Murphy, Yolanda and Robert F. Murphy "The Woman's World," pp.111-141 in Women in the Forest by Yolanda Murphy and Robert F. Murphy, New York: Columbia University Press, 1974.

Piddocke, Stuart "The Potlach System of the Southern Kwakiutl: A New Perspective," pp.130-157 in ECB; from Southwest Journal of Anthropology, v.21 (1965):244-264.

Rappaport, Roy A. "Ritual Regulation of Environmental Relations among a New Guinea People," pp.181-201 in ECB; from Ethnology, v.6 (1967):17-30.

READING LOG II
Part B cont.

Sonnenfeld, J. "Changes in Eskimo Hunting Technology: An Introduction to Implement Geography," The Annals of the AAG, v.59 (1960):172-186.

Vermeer, D.E. "Population Pressure and Crop Rotational Changes among the Tiv of Nigeria," The Annals of the AAG, v.60 (1970):299-314.

Ward, R. G. "Cash Cropping and the Fijian Village," Geographical Journal, v.130 (1964): 484-506.

Part C: Selected Perspectives on Traditional Societies

Boserup, Ester "Male and Female Farming Systems," pp.15-36 in Boserup, E. Woman's Role in Economic Development. New York: St. Martin's Press, 1970

Bourdieu, P. "The Berber House," pp.98-110 in Rules and Meanings, ed. by Mary Douglas Penguin Education, 1973.

Clarke, J.I. "Studies of Semi-nomadism in North Africa," Economic Geography, v.35 (1959):95-108.

Elmendorf, Mary "The Dilemma of Peasant Women: A View from a Village in Yucatan," pp.88-94 in Women and Development, ed. by Irene Tinker and Michele Bo Bramsen, Overseas Development Council, 1976.

_____ "The Many Worlds of Women: Mexico," in Women in Society: In International and Comparative Perspectives. New York: Wiley-Interscience, 1977.

Helburn, N. "A Stereotype of Agriculture in Semi-arid Turkey," Geographical Review, v.45 (1955):375-384.

Murphey, R. "The Decline of North Africa since the Roman Occupation: Climatic or Human? The Annals of the AAG, v.41 (1951):116-132.

Smock, Audrey C. and Youssef, Nadia H. "The Changing Roles and Status of Women in Egypt," in Women and Society: In International and Comparative Perspectives. New York: Wiley-Interscience, 1977.

Part D: Perspectives on Development: The Interface with Modern Societies

Awad, M. "The Assimilation of Nomads in Egypt," Geographical Review, v.44 (1954):240-42.

Foster, George M. Traditional Societies and Technological Change, 2nd edition, New York: Harper and Row, 1973.

Fox, Greer Litton "Some Determinants of Modernism among Women in Ankara, Turkey," Journal of Marriage and Family, v.35 n.3 (1973):520-529.

Hance, W. A. "The Gezire: An Example in Development," Geographical Review, v.44 (1954):253-270.

READING LOG II
Part D cont.

Little, Kenneth "Women in African Towns South of the Sahara: The Urbanization Dilemma," pp. 78-87 in Women and Development ed. by Irene Tinker and Michele Bo Bramsen, Overseas Development Council, 1976.

Mernissi, Fatima "The Moslem World: Women excluded from Development," pp. 35-46 in Women and Development ed. by Irene Tinker and Michele Bo Bramsen, Overseas Development Council, 1976.

Rosen, Bernard C. and La Raia, Anita L. "Modernity in Women: An Index of Social Change in Brazil," Journal of Marriage and Family, v. 34 (1972):353-360.

Soja, E. W. and Tobin, R. J. "The Geography of Modernization: Paths, Patterns and Processes of Spatial Change in Developing Countries," pp. 155-164 in Third World Urbanization, ed. by Janet Abu-Lughcd and Richard Hay, Jr., Chicago: Maaroufa Press Inc., 1977.

Van Allen, Judith "Women in Africa: Modernization Means More Dependency," The Center Magazine, v. 7 (1974) n. 3:60-67.

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READING LOG III: MODERN SOCIETIES

Instructions

Select, read and take notes on a minimum of fifty (50) pages of material taken from the following list. Grades will be based on the amount of material read, the quality of the Log note and the demonstrated understanding of the readings in the discussion sections.

Adams, John S. "The Geography of Riots and Civil Disorders in the 1960's," pp.121-139 in ITG; from Economic Geography, v.48, n.1 (1972):24-42.

Bjorklund, Elaine M. "Ideology and Culture Exemplified in Southwestern Michigan," pp.251-272 in CG:SR; from The Annals of the AAG, v.54 (June,1964):227-241.

Durand, Loyal, Jr. "Mountain Moonshining in East Tennessee," pp.347-354 in CG:SR; from Geographical Review, v.46 (April,1956):169-181.

Francaviglia, Richard V. "Diffusion and Popular Culture: Comments on the Spatial Aspects of Music," pp.87-96 in ITG.

Gottmann, Jean "Megalopolis, or the Urbanization of the Eastern Seaboarc," pp. 178-192 in CG:SR; from Economic Geography, v.33 (July,1957):189-200.

Klimm, Lester E. "The Empty Areas of the Northeastern United States," pp.166-178 in CG:SR; from Geographical Review, v.44 (July,1954):325-345.

Lanegran, David A. "Where is Everybody? A Geog rapher's View of the Population of the United States," pp.152-169 in ITG.

Lanegran, David A. and Snowfield, John G. "Families with Low Incomes in Rural America," pp.189-201 in ITG.

Lueck, Vaughn "Hierarchy and Diffusion: The U.S. Sunday Newspaper," pp.65-70 in ITG.

McColl, Robert W. "Vietnam, Cuba and the Ghetto," pp. 112-120 in ITG.

Meinig, D. W. "The Mormon Culture Region: Strategies and Patterns in the Geography of the American West, 1847-1964," pp.515-556 in CG:SR; from Annals of the AAG, v.60 (June,1965):191-220.

Morrill, Richard L. "The Negro Ghetto: Problems and Alternatives," pp.239-250 in CG:SR; from Geographical Journal, v.4 (July, 1965):339-381.

Pyle, Gerald F. "The Diffusion of Cholera in the United States in the Nineteenth Century," pp. 71-86 in ITG; from Geographical Analysis, v.1 (1969):59-75.

Rooney, John F., Jr. "Up from the Mines and Out from the Prairies: Some Geographical Implications of Football in the United States," pp.97-111 in ITG; from Geographical Review, v.59 (1969):471-492.

READING LOG III

Skaggs, Richard and Lanegran, David A. "Paradise Lost: A Geographical Look at the Environment," pp.170-183 in ITG.

* * * *

APPENDIX 8

Comments at Workshop "Discovering Women's Place: Teaching Modules for Introductory Human Geography Courses"

West Lakes Division Meeting, Association of American Geographers, Pick-Congress Hotel, Chicago, Illinois, October 11, 1979

James E. Landing
University of Illinois at Chicago Circle

I was a cooperator on the AAG Project and introduced all four units of the experimental structure (Day Care Centers, Migration of Latin American Women, Women and Crime, Women's Role in Changing the Face of the Earth) to an introductory college freshman class in Geography. The ditto sheet handed to you shows the basic outline of this course with inserts where I pieced the four units to make a coherent and smooth subject flow.

Each unit was presented during a session of about 40 minutes, the only constraint being an effort on my part not to modify the basic materials of the unit in any substantive manner. The students were, essentially, treated as consumers; that is, they were asked to respond, in terms of evaluation, on the basis of personal attitudes toward the material presented, and also its appropriateness in a college introductory geography class.

Student responses can be viewed from the general as well as from the specific responses to the four presentations. In general, males were supportive, but not overwhelmingly so. The reaction of individual males seemed to indicate that certain messages had been delivered, but many responses of males clearly indicate the need of continued efforts on the entire problem of attitudes toward women. Female responses were more highly supportive,

with much personal communication expressed to me largely from Latino (primarily Mexicans and Puerto Ricans) and black females of a very supportive nature. Minority females frequently commented on the fact that they had never heard a discussion of such topics in any classroom setting in their lives. White females that seemed non-supportive tended to state their objections on academic grounds, claiming they could find no reasonable fit for such discussion in an academic setting (which obviously says something about American education).

To be more specific, however, it should be mentioned that males, in no way, were flippant and many responses indicated that males had engaged in a good deal of serious thinking on the role of women. A good deal of thought, however, was still very much sexist oriented and strongly male dominant.

It was quite a revelation, and a sad one, to discover that so many of the "academic" females were apparently unable to rise to the opportunity of having their real role in life underscored and appreciated. It seems apparent that many college females are not yet ready for a departure from traditional attitudes toward females. Perhaps the college environment lulls them into a false sense of what their life might yet be. Other females felt it inappropriate to study women's traditional roles, apparently feeling that to do so would encourage the maintenance of such roles.

There was a considerable questioning by the students as to the appropriateness of the material in an introductory college geography course. Although some of this can be attributed to the fact that their understanding of geography was not yet very well developed, a good deal of it must be

attributed to the very nature and structure of the material and the manner in which it was presented. The fact that many felt the materials would be more appropriate in a sociology or anthropology course seems to indicate familiarity with the core focus of those disciplines and a lack of understanding of the nature of social and cultural geography.

It seems obvious that the role of the instructor in tightening the definition of geography into a working model that students can understand and work with needs strengthening. It will also require that the unit materials keep a very clear cut expression of geographic thought and methodology and a more explicit statement of the fit of the explanations and research into the fabric of the field of geography.

One thing seems clear, however. Few students feel as strongly negative on the role of women as one male who reported to me orally that "women, by nature, are domesticated and domestic, and we should not be tampering with such iron laws of nature."

GEOG 100
Concepts in Geography

University of Illinois
at Chicago Circle

J.E. Landing

Week of Quarter	Discussion Theme	Text Readings
1	The Nature of Geography	Preface, Ch. 1
2	The Dynamics of Size	Ch. 2
3	The Dynamics of Growth (Day Care Centers)	Ch. 3
4	The Effects of Distance (Women and Crime)	Ch. 4
5	Communication Networks (Migration of Latin American Women)	Ch. 6, 7
6	Human-land energy processes	Chs. 13, 14
7	The Water System	Ch. 15
8	Energy and Cycles	Chs. 16, 17
9	Humans and Resource Use (Women's Role in Changing the Face of the Earth)	Chs. 20, 21
10	Analysis, Synthesis, Summary	
11	Evaluation	

Text: Kolars and Nystuen, Geography: The Study of Location, Culture, and Environment; McGraw-Hill Book Company, 1974.

(The above is a slightly modified outline utilized during the spring quarter of 1979 in GEOG 100, showing the placement of the four experimental modules on women's role. Circle Campus has an eleven week quarter, 10 weeks of instruction and one week for final examinations.)

APPENDIX 9

No. _____

Women in the Americas:
Sample Modules for College Geography

A. Participant profile

1. Are you a (a) faculty member ___, (b) Graduate student teaching assistant ___, (c) graduate student ___, (d) undergraduate student ___, (e) other _____ (please specify)?

2. Please list titles of undergraduate geography courses which you teach, other than those which are primarily physical or technique courses.

_____

_____

_____

3. If you teach an introductory human geography course, which of the following best describes its orientation? (a) cultural/historical ___, (b) social science ___, (c) regional ___, (d) other (Please specify) _____

4. Which of the following best describes the organization of this introductory human geography course? (a) lecture only ___, (b) lecture/discussion ___, (c) lecture with teaching assistant led discussion ___, (d) audio-tutorial, P.S.I. or similar format ___, (e) other (Please specify) _____

5. To which of the following kinds of institutions do you belong? (a) junior college ___, (b) four year college ___, (c) a master's department ___, (d) a doctoral department ___, (e) other (please specify) _____

6. What are your own major areas of interests in geography?

_____

_____

7. What kind of teaching experience have you had? (a) none ___, (b) teaching assistantship in a faculty course ___, (c) teaching assistantship with full course responsibility ___, (d) other part time experience ___, (e) full-time faculty experience (note # of years) _____

8. Please indicate if you are female ___ or male ___.

B. Evaluation of the modules

Please respond to each of the following questions by placing an X in the appropriate space.

How would you evaluate the suitability of each module for use in your teaching? (Note: if you do not teach, please base your judgement on an appropriate course with which you are familiar. Please identify this course by name and level.) _____

1. Women and the Cultural Landscape

highly suitable ____:____:____:____:____ quite unsuitable

2. Women and the Built Environment

highly suitable ____:____:____:____:____ quite unsuitable

3. Locational Decision Making: The Case of the Day Care Center

highly suitable ____:____:____:____:____ quite unsuitable

4. Village to Barriada: Contemporary Female Migration to Cities in Latin America

highly suitable ____:____:____:____:____ quite unsuitable

5. Geographic Perspectives on Social Change: The Examples of Women and Crime

highly suitable ____:____:____:____:____ quite unsuitable

C. Dissemination of the modules

Assume that the modules are in a final version appropriate for dissemination to college teachers of introductory human geography courses. What form of distribution would you recommend? Please rate each of the following possibilities.

1. Reproduce by inexpensive means and sell at cost by mail.

highly desirable ____:____:____:____:____ not at all desirable

2. Seek a subsidy for reproduction and make available for mail cost only

highly desirable ____:____:____:____:____ not at all desirable

3. Publish for commercial sale to instructor who will be responsible for reproducing student readings and materials.

highly desirable ____:____:____:____:____ not at all desirable

4. Publish for commercial sale to students with instructor to receive desk copy plus instructor guides.

highly desirable ____:____:____:____:____ not at all desirable

5. Request A.A.G. or N.C.G.E. to publish as a resource paper, special issue of the Journal of Geography or some other suitable form to issue to membership.

highly desirable ____:____:____:____:____ not at all desirable

6. Disseminate through special sessions at meetings

highly desirable ____:____:____:____:____ not at all desirable

7. Seek funding for workshops at which teachers could adapt these modules to their own needs and contribute to the development of additional materials.

highly desirable ____:____:____:____:____ not at all desirable

8. Other (please specify).

9. What is the maximum price you would be prepared to pay for a single module?

$_____

D. Evaluation of this session

1. How effective do you think this session has been as a means of familiarizing you with the modules.

highly effective ____:____:____:____:____ not at all effective

2. If teaching materials on women were being presented at a conference session similar to this would you (a) be interested in attending again yourself ___, (b) encourage a colleague to attend ___, (c) suggest that a colleague not attend ___, (d) other (please specify)? _____.

F. You may have comments on the modules or the format of the session which you have not been able to make in response to our questions. Please feel free to add any other reactions, either positive or negative. We appreciate your contributions.

Module Evaluation

November, 1979

A. Please respond to each of the following questions by placing an X in the appropriate space.

1. How would you evaluate the utility of each module segment for your teaching? (Once ... If you do not teach, please base your judgement on an appropriate course with which you are familiar. Please identify that course by name and level.)

a. The student materials

highly useful ____ ____ ____ ____ ____ no use

b. The listing of key concepts

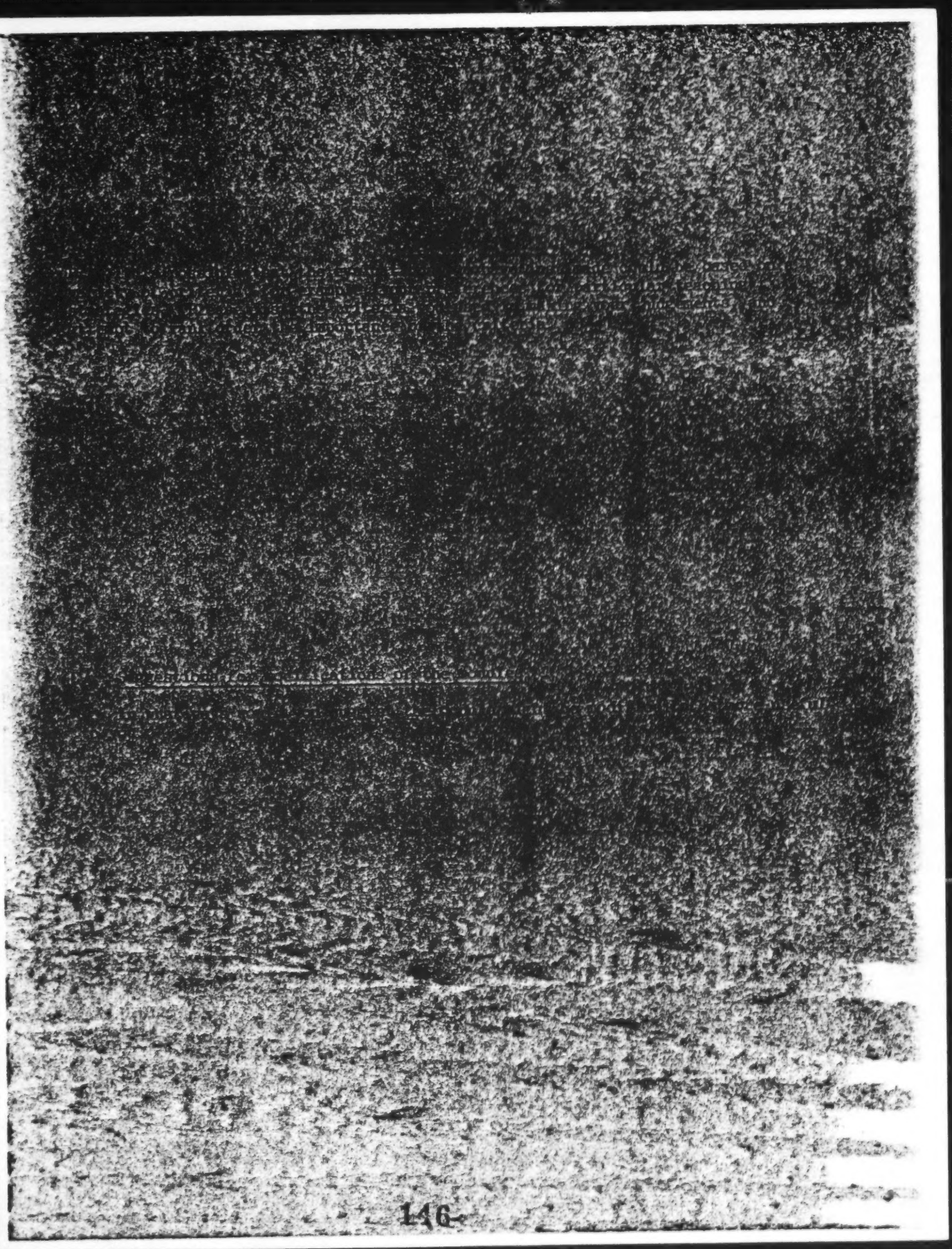
highly useful ____ ____ ____ ____ ____ no use

c. The discussion and activity suggestions

highly useful ____ ____ ____ ____ ____ no use

d. The annotated bibliography

highly useful ____ ____ ____ ____ ____ no use



APPENDIX 10

Overcoming Masculine Bias in Introductory College Human Geography Courses: A Module Approach

Module Review Guidelines

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Introduction

The goal of the project is to produce supplementary teaching materials for introductory human geography courses, on the assumption that these courses currently include little information about women, and most available text are not especially sensitive to the changes in social relationships and sex roles occurring in contemporary society. The Women's Educational Equity Act supports projects designed to enhance educational equity for women. The intent of this project is to produce teaching materials which would contribute to equity by (1) making women visible in the factual content of geography courses, and (2) raising questions in discussions and exercises which ask students to explore their own values about sex roles, women's contributions, and the problems faced by women.

The module approach has been chosen as a stop-gap measure. We would hope future college texts are more equitable than are those currently available. Writing new texts, however, is a longer term and more expensive project than could be accomplished by this modest grant. We think human geography can be better and more equitably taught by inclusion of material about women. However, because there is relatively little information in the geographic literature which treats women, we have drawn on a wider range of social science sources than usual in the development of geography curriculum materials.

In reviewing the modules, we would like you to consider the questions noted below. In addition, please feel free to make comments on issues we have not raised, but which you consider important. The purpose of this review is to provide formative evaluation data, but also to assist

us in preparing our final report to the U.S. Office on Education in which we need to discuss reactions to the modules.

Some of the questions might be answered in the same way for each module. In other cases, you will want to differentiate. Please answer in a format which you find easiest, but make sure we know which module or modules you are referring.

A. General presentation

1. What kinds of explanatory or introductory materials do you think should be included to explain and describe a module or module set?

   a. Discussion of the module concept as an instructional aid.

   b. Discussion of possible orientations in introducing materials on women, as might be developed from the attached list of "pervasive questions."

   c. A matrix summarizing concepts skills and value problems in the modules, (for example, in a format comparable to the enclosed page from Monk & Alexander, Physical Geography: Analytical & Applied).

   d. A key indicating the sections of major texts with which each module might be used.

   e. other - please make suggestions.

2. a) Do you think it is appropriate to present separate student and instructor packages?

   b) What categories of materials do you think should be included in students and instructor package - (e.g., objectives (stated in behavioral terms or not?), bibliographies, visual aids, etc.)

B. Student materials

1. For what kinds of students do the modules seem appropriate?

2. Do the modules make appropriate assumptions about students' prior knowledge?

3. How would you evaluate

   a. the organization of each module

   b. its scope

   c. its coverage

   d. What important additions, deletions or other modifications would you suggest?

4. What is your evaluation of the writing style of the modules in terms of

   a. vocabulary levels

   b. clarity of definitions

   c. use of examples

   d. presentation of problems

   e. stimulation of interest

   f. format

   g. use of tables and graphics?

5. What do you consider the most critical revisions necessary in the student materials?

C. Instructor materials

1. Do you think the listing of key concepts appropriately reflects the module content?

2. Are the "materials for developing a lecture discussion"presented in appropriate detail?

3. Do you think it is necessary to include suggestions for use/amount of class time for module activities? How would you evaluate those estimates included?

4. How appropriate do you consider the exercises in terms of level of difficulty and ability to develop student interest?

5. Do the modules include adequate information for

   a. the instructor to present exercises or discussion questions

   b. the students to complete exercises and participate in discussions?

6. Do the exercises/discussion questions build on the student materials in an appropriate manner? (How do you assess the balance between review/understanding questions or tasks, skill development tasks, and those requiring students to extrapolate from the materials provided or explore new areas?)

7. Are adequate graphic and statistical materials included? What suggestions would you make for changes?

8. Is the annotated bibliography suitable in terms of its length and style?

9. Do you think the instructor materials are pitched at the appropriate level, particularly with respect to assumptions about instructor knowledge?

10. What do you consider the most critical revisions necessary in the instructor materials?

D. The questions thus far may have led you to comment primarily on organizational and instructional aspects of the modules. If you have additional comments related content problems or suggestions for content additions or deletions, we would certainly appreciate them.